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Title:
Perfect score:
Sequence:
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Maximum DB seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM protein - protein search, using sw model
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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NO.	Score	Match Length DB	ength		ID	Description
,_	41	100.0	8	21	Y79124	Peptide antagonist
N	38	92.7	œ	21	Y79120	Peptide antagonist
w	36	87.8	۵	21	Y79122	
4	34	82.9	8	21	Y79123	
տ	33	80.5	œ	2	Y79112	
σ	ω G	80.5	œ	21	Y79118	
7	33	80.5	œ	21	Y79128	Peptide antagonist
80	33	80.5	115	20	Y42459	Human guanylin pre
9	ω w	80.5	115	20	Y42460	Human guanylin pre
10	3 3	80.5	362	21	Y82497	Human adenovirus t
11	33	80.5	377	21	Y68643	Amino acid sequenc

New peptide antagonist of zonulin useful as antiinflammatory agent for

WPI; 2000-205565/18

	44	43	42	41	40	39	38	37	36	35	34	ω	32	31	30		28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
30	30	30	30	30	30	31	<u>3</u> 1	31	<u>3</u> 1	31	31	31	31	ω H	31	<u>ω</u>	ω H	<u>ω</u>	31	32	32	32	32	32	3 2	32	32	32	32	32	32	ω ω	ယ
ω	ω.	ω.	ω.	ω.	ω •	5	5	<u>ب</u>	5	5	5	5	5	5	5	5.	5	5	5	8	æ	8	œ	œ	8	æ	Θ	ω.	ъ	œ		80.5	0
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21	20	16	20	19	21	21	21	20	21	21	21	21	21	15	15	21	20	21	21	20	20	20	20	20	20	20	20	20	20	21	20	21	21
B07577	W98121	R67970	Y32173	Y86035	Y79108	Y75122	Y75121	Y36831	G49731	G27095	G27097	G49732	B54096	R52793	R52775	Y79133	W94489	Y79119	Y84661	Y04154	Y01593	Y04172	Y12985	Y12678	W93619	Y35888	Y36051	v	5	\sim	യ	Y68662	Çī.
Protein encoded by	idopsis endo-	beta-1,3-	hlamydia psittac	oniae der	ntagonis	a meningi	Пe	i sequen	s thali	rotein	rotein	ali	atic	Murine BrE-3 immun	Murine BrE-3 immun	oetal	n fi	lde	Peptide antagnonis	Human 5' EST secre	Secreted protein e	5' EST sec	secreted pr	5' EST s	EST sec	human s	ded human s	secreted pr	ced.	B St	cret	cid s	Amino acid sequenc

ALIGNMENTS

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RESULT
Y79124
                                                             (UYMA-) UNIV MARYLAND BALTIMORE
                                                                                 03-AUG-1998;
                                                                                                       28-JUL-1999;
                                                                                                                           17-FEB-2000.
                                                                                                                                               WO200007609-A1
                                                                                                                                                                     Synthetic.
                                                                                                                                                                                         gastrointestinal inflammation; therapy
                                                                                                                                                                                                             neuroprotective; dermatological; antiulcer; antiviral;
antibacterial; cytostatic; anti-HIV; vulnerary; antiallergic;
                                                                                                                                                                                                                       Zonulin; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antiulcer; antiviral;
                                                                                                                                                                                                                                                                 Peptide antagonist of zonulin.
                                                                                                                                                                                                                                                                                       05-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                 Y79124 standard; Peptide; 8
                                                                                                                                                                                                    hypotensive;
                                                                                                                                                                                                                                                                                                             Y79124;
                                                                                                                                                                                                  immunosuppressive;
                                                                                  98US-0127815.
                                                                                                       99WO-US16683
                                                                                                                                                                                                                                                                                                                                 A
                                                                                                                                                                                                    antiparasitic; vasotropic;
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of zonulin

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CC (2), one of 25 such peptides (see Y3)105-29) of the invention, which bind to a zonula occludents toxin (20T) receptor, yet do not physiologically modulate the opening of mammalian tight junctions (173). The peptide antagonists are based on a common motif of 20T and human zonulins, which is believed to be critical for receptor of the invention of the property of the common motif of 20T and human zonulins, which is believed to be critical for receptor of the intestine of the inflammation, where they bind to the 20T receptor in the intestine of intestine of the intestine of the intestine of intestine of the intestine of the intestine of the intestine of intestine of the intestine of intestine of the intestine of intestine of intestine intestinal inflammation the peptide is useful for treating intestinal conditions that cause protein losing enteropathy of consessed intestinal conditions that cause protein losing enteropathy of caused by infection, e.g. Clostridum difficile infection, consessed intestinal conditions, e.g. gastrict infection, consessed intestinal conditions, e.g. gastritis, gastric cancer, collagenous colitis, inflammatory bowel disease, diseases with mucosal disease without unceration, e.g. mesenteric tuberculosis, und after surgical correction of congenital heart disease with Fontan's operation, collagenous colours and the period in the surgical correction of congenital heart disease with Fontan's operation, collageness without unceration, e.g. menetrier's diseases, e.g. collagenes, eosinophilic gastroenteritis, and immune diseases, collageness existement of conditions of congenital heart disease with Fontan's operation, collageness withematosus or food allergies, primarily to collage diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                     Zonulin; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebprotective; blood-brain barrier; antiological; antiulcer; antivizal; antibacterial; cytostatic; anti-HIV; vulnerary; antialiergic; hypotensive; immunosuppressive; antiparasitic; vasotropic; gastrointestinal inflammation; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 treating cerebral ischemia, stroke, cerebral edema, gastritis, shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
                                      (UYMA-) UNIV MARYLAND BALTIMORE
                                                                                              03-AUG-1998; · 98US-0127815.
                                                                                                                                                         28-JUL-1999;
                                                                                                                                                                                                                 17-FEB-2000
                                                                                                                                                                                                                                                                         W0200007609-A1
                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Peptide antagonist of zonulin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Y79120 standard; Peptide; 8 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
les 8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGLLVQDG 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggllvqdg 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 41; DB 21; ilarity 100.0%; Pred. No. 3.2e+05; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA;
                                                                                                                                                         99WO-US16683.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
      RESULT
Y79122
ID Y7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CC which bind to a zonula pertuies (see 1/31/2) receptor; yet do not the physiologically modulate the opening of mammalian tight junctions (CT) yield provide an tagonists are based on a common motif of ZOT cc and human zonulins, which is believed to be critical for receptor CC binding. They can be prepared by chemical synthesis or by use of recombinant DNA techniques. The peptide antagonists are used as an antiinflammatory agents in the treatment of gastrointestinal CC inflammation, where they bind to the ZOT receptor in the intestine CC and yet does not physiologically modulate the opening of TJ in the CC and yet does not physiologically modulate the opening of TJ in the CC interacted intestinal conditions that cause protein losing enteropathy CC caused by infection, e.g. Clostridium difficile infection (cc catsed by infection, e.g. Clostridium difficile infection, cc conteraction, bacterial overgrowth, whipple's disease, diseases with CC infestation, bacterial overgrowth, whipple's disease, diseases with CC mucosal errosion or ulcerations, e.g. gastrits, parasite cancer, collagenous colitis, inflammatory bowel disease, diseases marked by laterial conferital heart disease with pontar's operation, cc correction of congenital heart disease with pontar's operation, correction of congenital heart disease with pontar's operation, colliac disease, eosinophilic gastroenteritis, and immune diseases, colliac disease, eosinophilic gastroenteritis, and immune diseases, colliac disease, eosinophilic gastroenteritis, primarily to mily provided the primarily to mily p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 7; Conserv
                                                                                                                                                                                                                                                               Zonulin; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antiulcer; antiviral; antibacterial; cytostatic; anti-HIV; vulnerary; antiallergic; hypotensive; immunosuppressive; antiparasitic; vasotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     e.g. systemic lupus milk.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This present sequence is that of a peptide antagonist of zonul (2), one of 25 such peptides (see Y79105-29) of the invention, which bind to a zonula occludens toxin (207) receptor, yet do
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New peptide antagonist of zonulin useful as antiinflammatory agent for
treating cerebral ischemia, stroke, cerebral edema gastritis,
shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
28-JUL-1999;
                                                                                                                      WO200007609-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide antagonist of zonulin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Y79122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Y79122 standard; Peptide; 8 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-205565/18.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
   99WO-US16683.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 38; DB 21;
Pred. No. 3.2e+05;
1; Mismatches 0
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Length 8; Indels

0; Gaps

0

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В

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CC (TJ). The peptide antagonists are based on a common motif of 207 CC and human zonulins, which is believed to be critical for receptor CC binding. They can be prepared by chemical synthesis or by use of CC recombinant DNA techniques. The peptide antagonists are used as an CC antiinflammation, where they bind to the ZOT receptor in the intestinal CC inflammation, where they bind to the ZOT receptor in the intestinal CC inflammation, where they bind to the ZOT receptor in the intestinal CC inflammation conditions give rise to CC increased intestinal permeability modulate the opening of TJ in the CC increased intestinal conditions that cause protein losing enteropathy caused by infection, e.g. Clostridium difficile infection, e.g. clostridium difficile infection, e.g. clostridium difficile infection, e.g. congenitations that cause protein losing enteropathy concerning colitis, shigellosis, viral gastroenteritis, parasite with CC mucosal erosion or ulcerations, e.g. gastritis, gastric cancer, CC collagenous colitis, inflammatory bowel disease, diseases with CC sarcoidosis lymphoma, mesenteric tubercolosis, and after surgical CC correction of congenital heart disease with Fontan's operation, CC mucosal disease without ulceration, e.g. Menetrier's disease, cellia, systemic lupus erythematosus or food allergies, primarily to CC milk.
                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Thes 7; Conserv
밁
                      Y79123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This present sequence is that of a peptide antagonist (2), one of 25 such peptides (see Y79105-29) of the in which bind to a zonula occludens toxin (ZOT) receptor.
                                                                                                                   Peptide antagonist of zonulin
                                                                                                                                          05-JUN-2000
                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    which bind to a zonula occludens toxin (ZOT) receptor, yet do not physiologically modulate the opening of mammalian tight junctions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 46; 69pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New peptide antagonist of zonulin useful as antiinflammatory agent treating cerebral ischemia, stroke, cerebral edema, gastritis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-205565/18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYMA-) UNIV MARYLAND BALTIMORE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-AUG-1998;
                                                                                                                                                                                                                                                  ب
                                                                                                                                                                                                                                                                       1 GGLLVQDG
                                                                                                                                                                                                                                                gglcvqdg
                                                                                                                                                                                      standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                        œ
                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0127815
                                                                                                                                                                                                                                                                                                          87.8%;
87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 English.
                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                          Score 36; I
                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                        DB 21;
3.2e+05;
                                                                                                                                                                                                                                                                                                                   Length 8;
                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of zonulin
                                                                                                                                                                                                                                                                                             0
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RESULT
Y79112
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (T). The peptide antagonists are based on a common motif of ZOT and human zonulins, which is believed to be critical for receptor binding. They can be prepared by chemical synthesis or by use of recombinant DNA techniques. The peptide antagonists are used as an antiinflammatton, where they bind to the ZOT receptor in the intestine and yet does not physiologically modules.
blood-brain barrier;
neuroprotective; deri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mucosal erosion or ulcerations, e.g. gastritis, gastric cancer, collagenous colitis, inflammatory bowel disease, diseases marked by lymphatic obstruction, e.g. congenital intestinal lymphangdectasia, sarcoldosis lymphoma, mesenteric tuberculosis, and after surgical correction of congenital heart disease with Fontan's operation, mucosal diseases without ulceration, e.g. Menetrier's disease, coeliac disease, eosinophilic gastroenteritis, and immune diseases,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and yet does not physiologically modulate the opening of TJ in the intestine. Gastrointestinal inflammation conditions give rise to increased intestinal permeability and the peptide is useful for treating intestinal conditions that cause protein losing enteropathy caused by infection, e.g. Clostridium difficile infection,
                                                         Zonulin; antagonist;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             e.g. systemic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            enterocolitis, shigellosis, viral gastroenteritis, parasite infestation, bacterial overgrowth, whipple's disease, disea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      which bind to a zonula occludens toxin (ZOT) receptor, physiologically modulate the opening of mammalian tight
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This present sequence is that of a peptide antagonist of zonulin (2), one of 25 such peptides (see Y79105-29) of the invention, which bind to a zonula occludens toxin (20T) receptor, yet do no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New peptide antagonist of zonulin useful as antiinflammatory agent for treating cerebral ischemia, stroke, cerebral edema, gastritis, shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
                                                                                                                                                                              05-JUN-2000
                                                                                                                                                                                                                                        Y79112;
                                                                                                                                                                                                                                                                                                 Y79112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page 47; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UYMA-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-FEB-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GGLLVQDG 8
                                                                                                                                                                                                                                                                                                                                                                                                                                           1 ggllvqpg 8
                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity 7; Conserv
                                                                                                                     antagonist of zonulin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Α,
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ier; antiinflammatory; cerebroprotective;
dermatological; antiulcer; antiviral;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                erythematosus
                                                            zonula occludens toxin receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82.9%;
87.5%;
                                                                                                                                                                                                                                                                                                 8 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 34; DB 21;
Pred. No. 3.2e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   or
F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          food allergies,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diseases with
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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This present sequence is that of a peptide antagonist of zonulin (2), one of 25 such peptides (see y79105-29) of the invention, which bind to a zonula occludent toxin (207) receptor, yet do not compliant to a zonula occludent toxin (207) receptor, yet do not physiologically modulate the opening of mammalian tight junctions (T). The peptide antagonists are based on a common motif of 207 cand human zonulins, which is believed to be critical for receptor binding. They can be prepared by chemical synthesis or by use of recombinant DNA techniques. The peptide antagonists are used as an antinifiammation, where they bind to the 207 receptor in the intestinal inflammation where they bind to the 207 receptor in the intestinal candidate the opening of TJ in the intestine. Gastrointestinal inflammation conditions give rise to intestine. Gastrointestinal inflammation conditions give rise to concased intestinal permeability and the peptide is useful for treating intestinal conditions that cause protein losing enteropathy caused by infection, e.g. Clostridium difficile infection.

Caused by infection, e.g. Clostridium difficile infection, caused by infection, e.g. congenitan spatrality, parasite collagenous colitis, inflammatory bowel disease, diseases with collagenous colitis, inflammatory bowel disease, diseases with collagenous colitis, inflammatory bowel disease, diseases marked by lymphatic obstruction, e.g. congenital intestinal lymphangiectasia, collagenous colitis, inflammatory bowel disease, diseases marked by lymphonic best of congenital heart disease with Fontan's operation, collagenous colitis, inflammatory bowel disease, diseases, diseases, cosinophilic gastroonteritis, and immune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 80.5%;
Best Local Similarity 87.5%;
Matches 7; Conservative
                                                              05-JUN-2000
          Peptide antagonist of zonulin.
                                                                                                                                                                         Y79118 standard; Peptide; 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page 43; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New peptide antagonist of zonulin useful as antiinflammatory agent for
treating cerebral ischemia, stroke, cerebral edema, gastritis,
shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYMA-) UNIV MARYLAND BALTIMORE
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                                                                                                                                                                                                                                                                                                                                        1 GGLLVQDG 8
                                                                                                                                                                                                                                                                                                            grllvgdg 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 AA;
                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                    Score 33; DB 21;
Pred. No. 3.2e+05;
0; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   vasotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 8;
                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                    0;
RESULT
Y79128
ID Y7
                                                                                                                                                                  B,
                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                    This present sequence is that of a peptide antagonist of zonulin (2), one of 25 such peptides (see Y9105-29) of the invention. CC which bind to a zonula occludens toxin (207) receptor, yet do not compliant to the control of the invention. CC physiologically modulate the opening of mammalian tight junctions CC (TJ). The peptide antagonists are based on a common motif of 207 and human zonulins, which is believed to be critical for receptor binding. They can be prepared by chemical synthesis or by use of recombinant DNA techniques. The peptide antagonists are used as an antiinflammation, where they bind to the ZOT receptor in the intestinal inflammation where they bind to the ZOT receptor in the intestinal conditions that cause poeting of TJ in the intestine. Gastrointestinal inflammation conditions give rise to increased intestinal permeability and the peptide is useful for treating infestinal conditions that cause protein losing enteropathy caused by infection, e.g. Clostridium difficile infection, caused by infection, e.g. Clostridium difficile infection, cancer, diseases with collapse of the collists, inflammatory bowel disease, diseases with collists, inflammatory bowel disease, diseases with collists obstruction, e.g. congenital intestinal lymphangiectasia, correction of congenital heart disease with Fontan's operation, colliscase, esinophilic gastroenterits, and immune diseases, celiac disease, esinophilic gastroenterits, and immune diseases, celiac disease, esinophilic gastroenterits, and immune diseases, celiac disease, esinophilic gastroenterits, and immune diseases, celiac celiac disease, esinophilic gastroenterits, and immune diseases.
                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 6
                    Y79128 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 45; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zonulia; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebroprotective; benedoprotective; dematological; antiulcer; antiviral; antibacterial; cytostatic; anti-HTV; vulnerary; antialiergic; hypotensive; immunosuppressive; anti-parasitic; vasotropic; gastrointestinal inflammation; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New peptide antagonist of zonulin useful as antinflammatory egent
treating cerebral isothemia, stroke, cerebral edema, gastritis,
shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fasano
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-JUL-1999;
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                                                                                                                                                           1 GGLLVQDG 8
||: ||||
1 ggvcvgdg 8
                                                                                                                                                                                                                                                                          Similarity 75. 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                             8 AA;
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                                                                                                                                                                                                                                                                                                  75.0%;
                                                                                                                                                                                                                                                                          Score 33; DB 21;
Pred. No. 3.2e+05;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                          Length 8;
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RESULT Y79118

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Gaps

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В 8

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Sequence

05-JUN-2000

(first entry)

Y79128

Peptide antagonist

of

zonulin.

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                                                                                                                                                                                                                                     intestine. Gastrointestinal inflammation conditions year and increased intestinal permeability and the peptide is useful for treating intestinal conditions that cause protein losing enteropathy caused by infection, e.g. Clostridium difficile infection, and conditions that cause protein losing enteropathy caused by infection, e.g. Clostridium difficile infection.

Confection in the conditions of the confection of the confections, e.g. gastritis, gastric cancer, collagenous colitis, inflammatory bowel disease, diseases marked by collagenous colitis, inflammatory bowel disease, and after surgical correction of congenital heart disease with Fontan's operation, communication of congenital heart disease with Fontan's operation, communication of congenital heart disease with Fontan's operation, communication of congenital heart disease with grant disease, end immune disease, coeliac disease, eosinophilic gastroenteritis, and immune disease, coeliac disease, eosinophilic gastroenteritis, and immune diseases, coeliac disease, eosinophilic gastroenteritis, and immune diseases, coeliac disease, eosinophilic gastroenteritis, paration, coeliac disease, eosinophilic gastroenteritis, and immune disease, coeliac disease, eosinophilic gastroenteritis, and immune diseases, coeliac disease, eosinophilic gastroenteritis, and immune diseases, coeliac disease, eosinophilic gastroenteritis, and immune diseases, coeliac disease, eosinophilic gastroenteritis, coeliac disease, paration, coeliac disease, coeliac disease,
                                                                                                          Matches
                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    recombinant DNA techniques. The peptide antagonists are used as an antiinflammatory agents in the treatment of gastrointestinal inflammation, where they bind to the ZOT receptor in the intestine and yet does not physiologically modulate the opening of TJ in the intestine. Gastrointestinal inflammation conditions give rise to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zonulin; antagonist; zonula occludens toxin receptor; blood brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antiulcer; antiviral; antibacterial; cytostatic; anti-HIV; vulnerary; antiallergic; hypotensive; immunosuppressive; antiparasitic; vasotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New peptide antagonist of zonulin useful as antiinflammatory agent treating cerebral ischemia, stroke, cerebral edema, gastritis, shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    physiologically modulate the opening of mammalian tight junctions (TJ). The peptide antagonists are based on a common motif of ZOT and human zonulins, which is believed to be critical for receptor binding. They can be prepared by chemical synthesis or by use of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This present sequence is that of a peptide antagonist of zonulin (2), one of 25 such peptides (see Y79105-29) of the invention, which bind to a zonula occludens toxin (ZOT) receptor, yet do not physiologically modulate the opening of mammalian tight junctions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-205565/18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-JUL-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
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                        II IIIII
ggglvqdg
                                                                                                     Similarity 7; Conser
                                                                                                       Conservative
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                                                                                                                             80.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      English.
                                                                                                     0
                                                                                                                             Pred. No. 3
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                                                                                                     Mismatches
                                                                                               3.2e+05;
1;
                                                                                                                                                        DB 21;
                                                                                                                                                   Length 8;
                                                                                                     Indels
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                                                                                                  Gaps
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RESULT
Y42460
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Y42459
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                                                                                                                                                                    QV
                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 6; Conser
Human; guanylin; preprohormone; intestinal guanylate cyclase regulator; bacterium; heat stable enterotoxin; laxative; constipation.
                                                     21-DEC-1999
                                                                          Y42460
                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                          This sequence represents a human guanylin preprohormone which is cleaved to generate a 15 amino acid mature peptide (Y42458). This sequence is the encoded protein from a composite DNA sequence isolated by probing a human duodenum cDNA library with the corresponding rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Y42459 standard; Protein; 115
                                                                                             Y42460 standard; Protein; 115
                                                                                                                                                                                                                                                                 activate intestinal guanylate cyclases. The guanyliused as a laxative in the treatment of constipation.
                                                                                                                                                                                                                                                                                      coding sequence. Guanylin is an intestinal guanylate cyclase regulator which has similarity to bacterial heat stable enterotoxins which
                                                                                                                                                                                                                                                                                                                                                               Disclosure; Fig 1; 14pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Wiegand RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human guanylin
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                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-JUN-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                    Isolated protein used as a laxative
                                                                                                                                                                                                                                                                                                                                                                                                                                                            (SEAR ) SEARLE & CO G D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human;
                                                                                                                                                 20
                                                                                                                                                          1 GGLLVQDG
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                                                                                                                                                                                                                                                                                                                                                                                                         1999-590442/50
DB; Z22677.
                                                                                                                                                ggvtvqdg
                               guanylin
                                                                                                                                                                                                                                              115 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ylin; preprohormone; intestinal guanylate cyclase regulator; heat stable enterotoxin; laxative; constipation.
                                                                                                                                                                                           Conservative
                                                   (first entry)
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                                                                                                                                                                     8
                                                                                                                                                 27
                             preprohormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92US-0903029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        92US-0903029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             preprohormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ∕label= unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                        ر
اور
                                                                                                                                                                                                     80.5%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                          Fok
                                                                                                                                                                                                     Score
Pred.
                               sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                          KF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence
                                                                                             A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ξ
                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                    33;
No.
                                                                                                                                                                                                                                                                                                                                                                                    'n
                                                                                                                                                                                                     DB
37;
                                                                                                                                                                                                                                                                                                                                                                                    the treatment of constipation
                                                                                                                                                                                                                                                                            The guanylin peptide can
                                                                                                                                                                                                               20;
                                                                                                                                                                                                              Length 115;
                                                                                                                                                                                          0;
                                                                                                                                                                                          Gaps
                                                                                                                                                                                          0;
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RESULT
Y82497
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                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 75.0
Matches 6; Conservative
Recombinant fiber protein used for creating vectors for delivering a desired gene to a cell with minimal ectopic infection, comprises an amino terminus of an adenoviral fiber protein and a trimerization
                                                  Wickham TJ, Kovesdi I,
                                                                                                                                                                                                                                                                                                                                                                            This sequence represents a human guanylin preprohormone which is cleaved to generate a 15 amino acid mature peptide (Y4245). Guanylin is an intestinal guanylate cyclase regulator which has similarity to bacterial heat exists enterotoxins which activate intestinal guanylate cyclases. The guanylate can be used as a laxative in the treatment of constipation.
                                  WPI; 2000-271459/23.
                                                                  (GENV-) GENVEC INC.
                                                                                  11-SEP-1998;
28-MAY-1999;
                                                                                                           10-SEP-1999;
                                                                                                                          23-MAR-2000
                                                                                                                                           WO200015823-A1.
                                                                                                                                                         Human adenovirus type 9.
                                                                                                                                                                         Adenovirus; adenoviral; Ad; fibre knob; fibre protein; gene therapy; infection; virion.
                                                                                                                                                                                                Human adenovirus type 9 fibre knob protein sequence SEQ ID NO:3.
                                                                                                                                                                                                                 12-JUL-2000 (first entry)
                                                                                                                                                                                                                                                Y82497 standard; protein; 362 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Fig 2; 14pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Isolated protein used as a laxative in the treatment of constipation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wiegand RC, Currie MG, Fok
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (SEAR ) SEARLE & CO G D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-JUN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-JUN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US5969097-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                  10
                                                                                                                                                                                                                                                                                       20 ggvtvqdg 27
                                                                                                                                                                                                                                                                                                1 GGLLVQDG 8
                                                                                                                                                                                                                                                                                                                                                              115 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9205-0903029
                                                                                 9805-0099851
9905-0136529
                                                                                                          99WO-US20728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9205-0903029
                                                                                                                                                                                                                                                                                                                             80.58;
75.08;
                                                  Roelvink PW,
                                                                                                                                                                                                                                                                                                                       Score 33; DB 20; Length 115;
Pred, No. 37;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KF;
                                                  Bruder JT;
                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                               DЬ
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  RESULT 11
Y68643
                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-171149/15
                 Havenga M, Vogels R,
                                (INTR-) INTROGENE BY
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The present invention describes a recombinant fibre protein (I) comprising an amino terminus of an adenoviral fibre protein and a CC trimerisation domain. The trimerisation domain comprises: (a) an adenoviral fibre knob domain having a mutation affecting at least one amino acid residue within the region corresponding to the AB loop.

CB sheet, DE loop or FG loop of the wild-type adenoviral fibre knob domain produced in a eukaryotic cell; or (b) an adenoviral fibre knob domain produced in a eukaryotic cell; or (b) an adenoviral fibre knob domain corresponding to residue positions 404-405, 408, 409, 412-417, 420, 439, 441, 442, 443-443, 458, 460, 462, 466, 469, 409, 417-417, 482, 485, 461, 442, 443-443, 458, 460, 462, 466, 469, 409, 417-417, 482, 485, 481, 442, 443-443, 458, 460, 462, 465, 469-472, 474-477, 482, 485, 487-492, 505-512, 515, 517, 519, 521-528, 533, 535, 537-549, 551, 559, 569, 569 or 581 of the wild-type Ad5 fibre protein, and where the recombinant fibre protein trimerises when produced in a eukaryotic cell, (I) are used for creating vectors when are useful in avariety of sene-transfer applications, in vitro and in vivo, for delivering a desired gene to a cell with minimal ectopic infection. Particularly, the vectors are useful for infecting a desired cell type, an approach known as alternative targeting. (I) can be used in receptor-ligand construction of safer vectors for gene transfer application; The present sequence, which is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 6
08-JUL-1998;
                                                             08-JUL-1999;
                                                                                                                                  20-JAN-2000.
                                                                                                                                                                                           WO200003029-A2
                                                                                                                                                                                                                                                                                                 Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chimaeric adenovirus; gene therapy; antigenicity; fiber protein; serotype 9; penton protein; hexon protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amino acid sequence of the fiber protein of Adenovirus serotype 9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-MAY-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Y68643 standard; Protein; 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 45-46; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                               Adenovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGLLVQDG 8
||| :|||
67 ggltlqdg 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity 75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362 AA;
98EP-0202297
                                                             99WO-NL00436
                                                                                                                                                                                                                                                    1..29ion/Qualifiers
1..29 innote- "part of the tail of adenovirus serotype 5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80.5%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 33; DB 21; I
Pred. No. 1.2e+02;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ā
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 362;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
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RESULT 12
Y68659
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CC v68642-70 represent the amino acid sequences of the fiber proteins CC of Adenovirus serotypes 8, 9, 13, 14, 20, 23, 24, 25, 27, 28, 29, 30, CC 32, 33, 34, 35, 36, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49 and 51. CC The proteins are used in the course of the invention to construct CC chimaeric adenoviruses with reduced antigenicity. The chimaeric CC adenoviruses comprise at least part of a fiber protein of an adenovirus serotype providing the chimaeric virus with a desired host range and at CC least part of a penton or hexon protein from another, less antigenic, CC serotype. The chimaeric adenoviruses are useful for gene therapy, CC especially where repeated delivery is required. Adenoviruses of the CC invention are useful can be constructed to have a desired host range and CC adminished capability to raise neutralizing antibodies, an absence of, CC or decreased infection of, antigen presenting cells of the immune system CC (e.g. macrophages), and an ability to escape trapping in the liver cc through increased target cell specificity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 75.
Matches 6; Conservative
                                                                                                                                                                                                                            08-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                        serotype 37;
                                                                                                                                                                                                                                                                                                                                                                                                                        Chimaeric
Y68642.70 represent the amino acid sequences of the fiber proteins
                             Example 2;
                                                        New chimaeric adenoviruses containing a genome derived from different adenovirus serotypes, useful in gene therapy -
                                                                                                       WPI; 2000-171149/15
                                                                                                                                                                                              08-JUL-1998;
                                                                                                                                                                                                                                                        20-JAN-2000
                                                                                                                                                                                                                                                                                      WO200003029-A2
                                                                                                                                                                                                                                                                                                                                  Misc-difference
                                                                                                                                                                                                                                                                                                                                                                              Adenovirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Amino acid sequence of the fiber protein of Adenovirus serotype 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Y68659,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                   Havenga M,
                                                                                                                                                                 (INTR-) INTROGENE BV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Y68659 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New chimaeric adenoviruses containing adenovirus serotypes, useful in gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGLLVQDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ggltlqdg
                                                                                                                                                                                                                                                                                                                                                                                                          adenovirus; gene therapy; antigenicity; fiber protein;
37; penton protein; hexon protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fig 7; 92pp;
                            Fig 7; 92pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       377 AA
                                                                                                                                   Vogels R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89
                                                                                                                                                                                              98EP-0202297
                                                                                                                                                                                                                            99WO-NL00436
                                                                                                                                                                                                                                                                                                                                Location/Qualifiers 1..29
                                                                                                                                                                                                                                                                                                                  /note= "part of the tail of adenovirus serotype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80.5%;
75.0%;
                                                                                                                                   Bout A;
                            English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 33; DB 21;
Pred. No. 1.3e+02;
1; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ⋛
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g a genome derived from different therapy -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 377;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
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Y68662
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of Adenovirus serotypes 8, 9, 13, 14, 20, 23, 24, 25, 27, 28, 29, 30, 32, 33, 34, 35, 36, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49 and 51. The proteins are used in the course of the invention to construct chimaeric adenoviruses with reduced antigenicity. The chimaeric adenoviruses comprise at least part of a fiber protein of an adenovirus serotype providing the chimaeric virus with a desired host range and at least part of a penton or hexon protein from another, less antigenic, serotype. The chimaeric adenoviruses are useful for gene therapy, especially where repeated delivery is required. Adenoviruses of the invention are useful can be constructed to have a desired host range and a diminished capability to raise neutralizing antibodies, an absence of, or decreased infection of, antigen presenting cells of the immune system (e.g. macrophages), and an ability to escape trapping in the liver
Y68642-70 represent the amino acid sequences of the fiber proteins of Adenovirus serotypes 8, 9, 13, 14, 20, 23, 24, 25, 27, 28, 29, 32, 33, 34, 35, 36, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49 and The proteins are used in the course of the invention to construct chimaeric adenoviruses with reduced antigenicity. The chimaeric adenoviruses at least part of a fiber protein of an adenov
                                                                                                                          New chimaeric adenoviruses containing a genome
                                                                                                                                                                  WPI;
                                                                                                                                                                                           Havenga M,
                                                                                                                                                                                                                                                 08-JUL-1998;
                                                                                                                                                                                                                                                                           08-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                        Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                               serotype 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chimaeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Y68662
                                                                                                Example 2;
                                                                                                                        adenovirus serotypes, useful in
                                                                                                                                                                                                                     (INTR-) INTROGENE BV.
                                                                                                                                                                                                                                                                                                                               WO200003029-A2
                                                                                                                                                                                                                                                                                                                                                                                                Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                      Adenovirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Amino acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                     20-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Y68662 standard; Protein; 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          through increased
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
les 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GGLLVQDG 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ggltlqdg
                                                                                                                                                                  2000-171149/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               adenovirus; gene therapy; antigenicity; 42; penton protein; hexon protein.
                                                                                             Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 380
                                                                                                                                                                                           Vogels R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          89
                                                                                           7; 92pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ă,
                                                                                                                                                                                                                                                 98EP-0202297
                                                                                                                                                                                                                                                                            99WO-NL00436
                                                                                                                                                                                                                                                                                                                                                                      /note= "part of the tail
237
                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                        /note= "not specified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80.5%;
75.0%;
                                                                                             English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        fiber protein of Adenovirus serotype 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          specificity.
                                                                                                                        gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No.
                                                                                                                        therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 21;
1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                    of.
                                                                                                                                                                                                                                                                                                                                                                                   adenovirus serotype
                                                                                                                                       derived from different
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             fiber protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
    adenovirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                    ທຸ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and of,
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RESULT 14
Y27892
                                                                                 WPI; 1999-337740/28
                                                                           N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                      07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
07-NOV-1997;
                                                                                                                                                          Kyaw H,
                                                                                                                                                                                                  (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-NOV-1997;
07-NOV-1997;
07-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 6
                                                                                                                                                                                                                                                     17-NOV-1997;
                                                                                                                                                                                                                                                                                                                                  07-NOV-1997
                                                                                                                                                                                                                                                                                                                                                         07-NOV-1997
                                                                                                                                                                                                                                                                                                 17-NOV-1997
                                                                                                                                                                                                                                                                                                              17-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; secreted protein; fusion protein; gene therapy; protein therapy; developmental abnormality; foetal deficiency; blood; allergy; renal; inflammation; ischaemic shock; Alzheimer's disease; restencis; AlDS; cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus; osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digest; thymus; confirm metabolicans; testis; lung; thyroiditis; thyroid; digestion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09924836-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Y27892;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Y27892 standard; Protein; 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          serotype providing the chimaeric virus with a desired host range and at least part of a penton or hexon protein from another, less antigenic, scrotype. The chimaeric adenoviruses are useful for gene therapy, invention are useful can be constructed. Adenoviruses of the adminished capability to raise neutralizing antibodies, an absence of, of e.g. macrophages), and an ability to escape trapping in the liwer through increased target cell specificity.
                                                                                                                              f KC, EDITE
H, Lafleur DW,
                                                                                                                                  SM,
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                                                                                                                           Shi Y,
                                                                                                                                                             Ebner R,
                                                                                                                                                                                                                                          97US-0066094
97US-0066095
97US-0066089
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970S 0064912
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97US-0064900
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                                                                                                                     Soppet DR,
                                                                                                                                             Moore
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                                                                                                                                      PA,
                                                                                                                   Wei Y;
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1; Mismatches
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                                                                                                                              Feng P, Ja
Vi J, Olsen
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1.3e+02;
1;
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en HS, Rosen CA;
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Best Local
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v

Ruben

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A05803 to A05872 encode proteins, polypeptides and peptides (given in Y91775 to Y91343) isolated from Group B Streptococcus (GBS), also known as Streptococcus agalactiae. The GBS polynucleotides and polypeptides have antibacterial activity. Immunogenic compositions comprising GBS polynucleotides or polypeptides can be used as vaccines and for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence represents a secreted human protein encoded by the gene CC clone detailed in the descriptor line. The gene can be used to generate portion (e.g., x84924) for increasing the stability of the fene can be used to generate as compared to the human protein only.

CC as compared to the human protein only.

CC acid sequences: x84933-x88957; amino acid sequences x77567-x27933) which are useful for preventing, treating or ameliorating medical conditions are useful for preventing, treating or ameliorating medical conditions core by determining the amount of the new polypeptides in a sample which cuses are described for each of the 125 polynucleotides, based on uses, tissues they are most highly expressed in (see x84933 for described courses).
                                                                                                                                                  Claim 1; Fig 1; 123pp;
                                                                                                                                                                                       Streptococcal infections
                                                                                                                                                                                                                                                   WPI; 2000-195299/17.
                                                                                                                                                                                                                                                                                                                      (MICR-) MICROBIAL TECHNICS LTD.
                                                                                                                                                                                                                                                                                                                                                                          27-JUL-1998;
19-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                27-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W0200006736-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Streptococcus agalactiae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Group B Streptococcus; Streptococcus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Y91324 standard;
                                                                                                                                                      Group B Streptococcus protein, useful as vaccine, for diagnosis of eptococcal infections and for screening of antibodies or affibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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y; affibody;
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                                                                                                                                                                                                                                                                                        Wells JM,
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                                                                                                                                                                                                                                                                                                                                                                 98GB-0016335.
99US-0125163.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page 166; 507pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antibacterial.
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75.0%;
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Pred. No.
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                                                                                                                                                                                                                                                                                 SB;
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CC treatment or prophylaxis of GBS infection. The polynucleotides and CC polypeptides can also be used in the detection of GBS and for screening CC pNA encoding bacterial cell envelope associated or secreted antigens in CC gram positive bacteria. AOSB973 to AOSB941 represent primers used in the XX SQ Sequence 116 AA;

Query Match PB.0%; Score 32; DB 21; Length 116; Best Local Similarity 62.5%; Pred. No. 58; Matches 5; Conservative 3; Mismatches 0; Indels 0; Gaps 0; Oy 1 GGLLVQDG 8 | II|:::|| Db 90 gglvledg 97

Search completed: June 13, 2001, 14:14:40

Search completed: June 13, 2001, 14:14:40
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Title:
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Maximum DB
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCT-US01-05825A-20
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PIR_67:*
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Gapop 10.0 , Gapext 0.5
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A46279
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T33100
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F83627
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CS3 pilin synthesi
probable nitrogen
phage-related prot
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hypothetical prote
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hypothetical prote
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hypothetical glyci
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fiber protein - hu
fiber protein - hu
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ABC transport
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ALIGNMENTS

RESULT S42532

hypothetical protein 1 - Synechococcus sp.
C;Speciles: Synechococcus sp.
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 05-Mar-1999
C;Accession: S42532
R;Jones, M.C.; Jenkins, J.M.; Smith, A.G.; Howe, C.J.
Plant Mol. Biol. 24, 435-448, 1994
A;Title: Cloning and Characterisation of genes for tetrapyrrole biosynthesis
A;Reference number: S42531; MUID:94169298

biosynthesis

from

A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-403 <JON>

A; Reference number: A; Accession: S42532

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A; Experimental source: strain PAO1 C; Genetics:
                                    A; Molecule type: DNA
A; Residues: 1-449 <STO>
A; Cross-references: GB:
                                                                                                         A;Title: Complete genome se
A;Reference number: A82950;
A;Accession: F83627
                                                                                                                                                                                                                                                                       hypothetical protein PA0142 [imported] - Pseudomonas aeruginosa (strain PA01) C;Species: Pseudomonas aeruginosa C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 31-Dec-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Note: the source is designated as Anacystis nidulans R2 (2;Superfamily: Synechococcus hypothetical protein 1; tetratricopeptide repeat homology (TT1):
F;283-316/Domain: tetratricopeptide repeat homology (TT2):
F;317-350/Domain: tetratricopeptide repeat homology (TT2):
F;351-384/Domain: tetratricopeptide repeat homology (TT3):
                                                                                                                                                                          R;Stover, C.K.; Pham, X.Q.; adman, S.; Yuan, Y.; Brody, .; Lory, S.; Olson, M.V. Nature 406, 959-964, 2000
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
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                                                                                             A; Status: preliminary
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7; Conserv
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                                    GB:AE004452; GB:AE004091; NID:g9945968; PIDN:AAG03532.1; GSPDB:GN
                                                                                                                                 sequence of Pseudomonas aeruginosa PA01, 50; MUID:20437337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90
87
                                                                                                                                                                                                              Erwin, A.L.; Mizoguchi, S.D.; Warrener, L.L.; Coulter, S.N.; Folger, K.R.; Kas,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 5 %
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Gaps

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A; Molecular type: DNA
A; Molecular type: DNA
A; Residues: 1-529 <FLA>
A; Residues: 1-529 <FLA>
A; Residues: 1-529 <FLA>
A; Residues: 1-529 <FLA>
A; Rese, DJ.; Mau, B; Shbo, Y
A; Rose, DJ.; Mau, B; Shbo, Y
A; Rose, DJ.; Mau, B; Shbo, Y
A; Rose, DJ.; Mau, B; Shbo, Y
A; Title: The complete genome sequence of Escherichia coli K-12.
A; Teference number: A64720; MUID:97426617
A; Accession: A65208
A; Accession: A65208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        purH bifunctional enzyme - Escherichia coli
%;Contains: IMP cyclohydrolase (EC 3.5.4.10); phosphoribosylaminoimidazolecarboxamide
C;Species: Escherichia coli
C;Date: 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change 11-Jun-1999
C;Accession: B34193; S09571; A65208
R;Alba, A; Mizobuchi, K
J, Blol. Chem. 264, 21239-21246, 11989
A;Title: Nucleotide sequence analysis of genes purH and purD involved in the de novo p
A;Reference number: A92739; MUID:90078227
A;Accession: B34193
A;Recidues: 1-529 CAIBA
A;Residues: 1-529 CAIBA
A;Residues: 1-529 CAIBA
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R.Chopra, A.K.; Peterson, J.W.; Prasad, R.
Biochim. Biophys. Acta 1090, 351-354, 1991

A.Title: Nucleotide sequence analysis of purH and purD genes fr.
A.Reference number: S18488; MUID:92062738

A.Accession: S18488

A.MOLECULE type: DNA
A.Residues: 1-508 CCHOS
A.Residues: 1-508 CCHOS
A.Cross-references: EMBL:M66160; NID:g154286; PIDN:AAA27197.1;
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A: Map position: 90 min
C; Superfamily: purH bifunctional enzyme
C; Keywords: hydrolase; multifunctional enzyme;
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DTEBPH
purH blfunctional enzyme - Salmonella typhimurium (fragment)
purH blfunctional enzyme - Salmonella typhimurium (fragment)
purH blfunctional enzyme - Salmonella typhimurium (fragment)
purH blfunctional enzyme - Salmonella typhimurium
c;Species: Salmonella typhimurium
c;Species: Salmonella typhimurium
c;Date: 31-Mar-1933 #sequence_revision 31-Mar-1993 #text_change 11-Jun-1999
C;Accession: S18488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A:Cross-references: EMBL.J05126; NID:g147419; PIDN:AAA24454.1; PID:g147420 R;Flannigan, K.A.; Hennigan, S.H.; Vogelbacker, H.H.; Gots, J.S.; Smith, J Mol. Microbiol. 4, 381-392, 1990 A;Fithe: Purine biosynthesis in Escherichia coli K12: structure and DNA sec A;Reference number: S09571; MUID:90286915 A;Recession: S09571
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Molecule type: DNA
Molecule type: DNA
Residues: 1-529 <BLAT>
^-~~~-ferences: GB:AE000473; GB:U00096; NID:g2367336; PIDN:AAC76980.1;
                                                                                                                                                                           Status: preliminary; nucleic acid
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Best Local Similarity 100.0%;
Matches 7; Conservative
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Best Local Similarity 75.4
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              363 GGLLVQD 369
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Pred. No. 17;
2; Mismatches
                                                                                                                                                                                    sequence
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pred. No. 19;
Mismatches
                                                                                                                                                                                    not shown;
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                                                                   PID:g1790439;
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                                                                                                                                                                                                                                                                                                purH bifunctional enzyme - Haemophilus influenzae (strain Rd KW20)
N:Contains: IMP cyclohydrolase (EC 3.5.4.10); phosphoribosylaminoimidezolecarboxamide
C:Species: Haemophilus influenzae
C:Date: 18-Aug-1995 #sequence_revision 18-Aug-1995 #text_change 18-Jun-1999
C:Accession: B64100
R:Fleischmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.; Kirkness, E.F.; Kerlavage
G:Gozyne, J.D.; Scott, J.; Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; Weldman
, D.M.; Brandon, R.C.; Fine, L.D.; Fritchman, J.L.; Geoghagen, N.S.M.
, Science 269, 496-512, 1995
A:Authors: Globhm, C.L.; McDorald, L.A.; Small, K.V.; Fraser, C.M.; Smith, H.O.; Vente
A:Title: Whole-genome random sequencing and assembly of Haemophilus influenzae Rd.
A:Reference number: A64000; MUID:95350630
A:Accession: B64100
A:Accession: B64100
A:Accession: Small sequence not shown; translation not shown
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A;Molecule type: DNA
A;Molecule type: Molecule typ
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Nature 406, 477-483, 2000
Nature 406, 477-483, 2000
Nature 506, Sequence of both chromosomes of the cholera pathogen Vibrio cholerae. A;Reference number: A82035; MUID:20406833
A;Accession: C82344
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A;Gene: purH; purJ
A;Map Position: 90 min
C;Superfamily: purH bifunctional enzyme
C;Keywords: hydrolase; multifunctional enzyme; purin
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                                                                                                                                       A.Cross-references: GB:032770; GB:142023; NID:91573898; PIDN:AAC22544.1; PID:91573904
C;Superfamily: purh bifunctional enzyme; purine nucleotide biosynthesis; transf
C;Keywords: hydrolase; multifunctional enzyme; purine nucleotide biosynthesis; transf
                                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-532 <TIGR>
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A;Map position: 1
C;Superfamily: purH bifunctional enzyme
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Best Local Similarity 100.0%;
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384 GGLLVQD 390
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H.; Dragoi, I.; Seller
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C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
C;Accession: T22166
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hypothetical
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                                                                                                                                                                                                                                                                                                                                                                                    adman, S.; Yuan, Y.; Brody,
.; Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
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R; Stover, C.K.; Pham, X.Q.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Species: Pseudomonas aeruginosa
C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 31-Dec-2000
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A;Introns: 46/2; 105/3; 187/3; 283/1; 365/3; 444/2;
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Matches 7
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                                                                                                                                            7; Conserv
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7; Conserv
glycine-rich protein Rv3595c - Mycobacterium tuberculosis (strain H37RV)
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L.L.; Coulter, S.N.; Folger, K.R.; Kas,
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                                                                                                                                                           Score .34;
Pred. No.
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Pred. No.
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Pred. No.
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Larbig, K.; Lim,
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                          A; Map position: 18 min
C; Superfamily: purH bifunctional enzyme
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                                                            A; Gene: purH;
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A; Cross references EMBL: J02732; NID: g143363; PIDN: AAA22683.1; PID: g143373
A; Cross references: EMBL: J02732; NID: g143363; PIDN: AAA22683.1; PID: g143373
A; Cross references: EMBL: J02732; NID: g143363; PIDN: AAA22683.1; PID: g143373
A; Cross references: EMBL: J02732; NID: g143363; PIDN: AAA2683.1; PID: g143373
A; Cross references: EMBL: J02732; NID: g143363; PIDN: AAA2683.1; PID: g143373
A; Cross references: Cross re
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A;Authors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G. A;Title: Deciphering the biology of Mycobacterium tuberculosis from the complete A;Reference number: A70500; MUID:98295987
A;Accession: D70954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J. Biol. Chem. 262, 8274-8287, 1987
A;Title: Cloning and characterization of a 12-gene cluster from Bacillus subtilis A;Reference number: A29326; MUID:87250425
A;Accession: A29183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N;Contains: IMP cyclohydrolase (EC 3.5.4.10); phosphoribosylaminoimidazolec
C;Species: Bacillus subtilis
C;Date: 30-Jun-1991 #sequence_revision 30-Jun-1991 #text_change 16-Jun-2000
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C;Superfamily: Phaseolus glycine-rich cell wall
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C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 20-Jun-2000
                                                                                        A;Cross-references: GB:Z99107;
A;Experimental source: strain ]
                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-512 <KUN>
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A; Residues: 1-512 <EBB>
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N;Contains: IMP cyclohydrolase (EC 3.5.4.10);
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Chem. 262, 8274-8287, 1987
                                                                                                                                                                                                                                                               nucleic acid sequence
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87.5%;
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Pred. No.
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multifunctional enzyme;

purine nucleotide biosynthesis;

transf

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guanylin precursor [validated] - human
C.Species: Homo sapiens (man)
C.Date: 21-Sep:1993 #sequence_revision 26-May-1995 #text_change 08-Dec-2000
C.Date: 21-Sep:1993 #sequence_revision 26-May-1995 #text_change 08-Dec-2000
                                                                                    RESULT
A46279
                                                                                                                                                                                                                                                                                                                                                                                                     polyprotein - tomato

C;Species: Lycopersicon esculentum (tomato)

C;Bate: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 11-May-2000

C;Accession: T17459

R;Parniske, M:; Jones, J.D.

Proc. Natl. Acad. Sci. U.S.A. 96, 5850-5855, 1999

A;Title: Recombination between diverged clusters of the tomato Cf-9 plant di
A;Reference number: Z18801; MIDI: 99254130

A;Accession: T17459
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C;Species: Caenorhabditis elegans
C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 18-Feb-2000
C;Accession: T33100
R;Geisel, C.; Wamsley, P.
submitted to the EMEL Data Library, May 1998
A;Description: The sequence of C. elegans cosmid H11E01.
A;Reference number: Z21282
A;Accession: T33100
                                                                                                                                                                                                                                                                                                                       A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-1542 CARS
A;Cross-references: EMBL;AF119040; NID:g4235640; PID:g4235644; PIDN:AAD13304.1
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A;Molecule type: DNA
A;Residues: 1-1510 <GET>
A;Cross-references: EMBL:AF067222; PIDN:AAC17017.1; GSPDB:GN00028; CESP:H11E01.3
A;Experimental source: strain Bristol N2; clone H11E01
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A.Introns: 73/2; 120/1; 178/3; 227/2; 262/1; 300/2; 345/1; 1430/3; 1468/2
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A; Gene: CESP:H11E01.3
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Best Local
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1; Mismatches
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Pred. No. 32;
1; Mismatches
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Pred. No. 1e+02;
2; Mismatches
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Query Match
Best Local Similarity
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hypothetical glycine-rich protein Rv2126c - Mycobacterium tuberculosis (strain H37RV) C: Species: Mycobacterium tuberculosis
C: Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 20-Jun-2000 C: Accession: A70514 Forces, R: Parkhill, J:; Garnier, T:; Churcher, C:; Harris, D:; Gordon: C: Connor, R: Davies, R:; Devlin, K:; Feltwell, T:; Gentles, S:; Hamiln, N:; Holroyd, Rajandream, M.A.; Rogers, J:; Rutter, S:; Seeger, K:; Skelton, S:; Squares, S. Nature 393, 537-544, 1998 A: Authors: Squares, R:; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G. A:; Fittle: Deciphering the biology of Mycobacterium tuberculosis from the complete geno A: Reference number: A70504 M0ID:98295987 A: Accession: A70514 A: Status: preliminary: nucleic acid sequence not shown; translation not shown A: Residues: 1-256 CCD.
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A: Molecule type: mRNA
A: Residues: 1-115 </br>
A: Residues: 1-115 </br>
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A: Residues: 1-115 </br>
A: Rotes: Gerences: GB: M95174; NID: g306823; PIDN: AAA58625.1; PID: g306824
A: Note: sequence extracted from NCBI backbone (NCBIN: 115377, NCBIP: 115378)
R: Wiegand, R.C.; Katc, J.; Huang, M.D.; Fok, K.F.; Kachur, J.F.; Currie, M. TEBBS Lett. 311, 150-154, 1992
A: Title: Human guanylin: cDNA isolation, structure, and activity.
A: Reference number: S29228; MUID: 93011964
A: Accession: S29228; MUID: 93011964
A: Accession: S29228
                                                    A;Cross-references: GB:Z97559; GB:AL123456; NID:g3261820; PIDN:CAB10721.1; PID:g32618
A;Experimental source: strai H37Rv
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A;Residues: 22-68 < KUH>
A;Experimental source: plasma
A;Note: amino-terminal sequencing of mature
C;Comment: Guanylin is an endogenous ligand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Map position: 1p35-1p34
C;Superfamily: guanylin
C;Reywords: hormone; intestine
F;1-21/Domain: signal sequence #status predicted
F;22-115/Product: guanylin #status experimental <
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R;Kuhn; M.; Raida, M.; Adermann, K.; Schulz Knappe, P.; Gerzer, R.; Heim, J.M.; Forss
FEBS Lett. 318, 205-209, 1993
A;Title: The circulating bloactive form of human guanylin is a high molecular weight
A;Reference number: S29807; MUID:93178628
A;Accession: S29807
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A;Title: Precursor structure, expression, and tissue distribution A;Reference number: A46279; MUID:93028409
A;Accession: A46279
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A; Residues: 1-115 <WIE>
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Best Local Similarity 75.0%;
Matches 6; Conservative
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collagen alpha 1(V) chain; fibrillar

collagen carboxyl-terminal homolo

75.0%;

Score 33; Pred. No

DB 2; 24;

Length

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5-methyltetrahydropteroyltriglutamate--homocysteine S-methyltransferase (EC 2.1.1.14) -
N;Alternate names: cobalamin-independent methionine synthase
C;Species: Methanobacterium thermoautotrophicum
C;Date: 28-oct-1996 #sequence_revision 13-Mar-1997 #text_change 20-Jun-2000
C;Accession: S62191
R;Vaupel, M; Dietz, H; Linder, D; Thauer, R.K.
Eur. J. Blochem. 236, 294-300, 1996
A;Title: Primary structure of cyclohydrolase (Mch) from Methanobacterium thermoautotroph
A;Reference number: S62190; MUID:96184910
A;Accession: S62191
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-319 <VAU>
A;Cross-references: EMBL:X92082; NID:g1103706; PIDN:CAA63062.1; PID:g1103707
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, October 1995
C;Genetics:
A;Start codon: TTG
C;Superfamily: 5-methyltetrahydropteroyltriglutamate--homocysteine S-methyltransferase
C;Keywords: methyltransferase
Search completed: June 13, 2001, 14:10:48 Job time: 149 sec
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Best Local Similarity 62:
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80 GGMMYKDG 87
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Sign (uspto)

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Maximum Match 100%
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        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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     June 13, 2001, 14:21:48; Search time 74.44 Seconds (without alignments) 3.681 Million cell updates/sec
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GUAN_HUMAN
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FIBP_ADE09
CS32_ECOLI
YOBK_BACSU
GUAC_ECOLI
SUN4_YEAST
FIXI_RHIME
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508 AA.		DB 1; 3; ches 0	eat. 99B5498BA13	It is produced nformatics an nformatics an There are long as its emoved. Usage t (See http://ch).	A.G., Howe C.J.; genes for tetrapy. s nidulans R2.";). L. STRONG TO H.INFI REPEATS. TTHER MET-1 OR MET-	date) update) 5'REGION nacystis; Synechc	403 AA.	MENTS	COCCONH COCCONH
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P15639;

01-APR-1990 (Rel. 14, Created)

01-APR-1990 (Rel. 14, Last sequence update)

30-MAY-2000 (Rel. 39, Last annotation update)

BIFUNCTIONAL PURINE BIOSYNTHESIS PROTEIN PURH (INCLUDES: PHOSPHORIBOSYLAMINOIMIDAZOLECARBOXAMIDE FORMYLTRANSFERASE (EC 2.1.2.3)

(AICAR TRANSFERMYLASE); IMP CYCLOHYDROLASE (EC 3.5.4.10) (INOSINICASE)
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01-AUG-1992 (Rel. 23, Created)
01-AUG-1992 (Rel. 23, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
30-MAY-2000 (Rel. 39, Last annotation update)
BIFUNCTIONAL PURINE BIOSYNTHESIS PROTEIN PURH [INCLUDES:
PHOSEHORIADSYLMATHOLINIDAYOLECARBOXAMIDE FORMYLTRANSFERASE (EC 2.1.2.3)
(AICAR TRANSFORMYLASE); IMP CYCLOHYDROLASE (EC 3.5.4.10) (INOSINICASE)
(IMP SYNTHETASE) (ATIC)] (FRAGMENT).
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Escherichia.
             NCBI_TaxID=562;
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Bacteria; Proteobacteria; gamma subdivision; Enterobacteriaceae;
                                                                                                                                                                                                                                                                                                  IMP SYNTHETASE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            363
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SIMILARITY: BELONGS TO THE PURH FAMILY.
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                                                                                                                                                                                                                                                                                                  (ATIC) ].
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85.4%; Score 35; DB 1; Length 508; 100.0%; Pred. No. 10; Live 0; Mismatches 0; Indels
                                                                                                                     gamma
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                                                                                                                     subdivision; Enterobacteriaceae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [1]
SEQUENCE FROM N.A.
MEDLINE-90078227; PubMed-2687276;
Matha A., Mizobuchi K.;
Nucleotide sequence analysis of genes de novo purine nucleotide biosynthesis
J. Biol. Chem. 264:21239-21246(1989).
                                                                                                           PIR, B34193; DTECPH.

ECOGENE; EG10795; purH.

InterPro; IPR002695; IMPCHas; 1.

Pfam; PF01808; AICARFT_IMPCHas; 1.

Purine biosynthesis; Transferase; Hydrolase; Multifunctional enzyme.

SEQUENCE 529 AA; 57329 MW; DC034ED01915DA68 CRC64;
                                                                                                                                                                          EMBL; J05126; AAA24454.1; -. EMBL; X51950; CAA36212.1; -. EMBL; U000006; AAC43104.1; -. EMBL; AE000473; AAC76980.1; -PIR; B34193; DTECPH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
STRAIN=KLZ / MG1655;
MEDLINE=40408392; PubMed=8265357;
Blattner F.R., Burland V.D., Plun
Blattner F.R., Burland V.D., Plun
Blattner F.R., Burland V.D., Plun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Purine biosynthesis in Escherichia coli K12: structure and sequence studies of the purHD locus."; Mol. Microbiol. 4:381-392(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  region from 89
Nucleic Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Analysis of the Escherichia coli genome. IV. DNA sequence of the region from 89.2 to 92.8 minutes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Flannigan K.A.,
Smith J.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-90286915; PubMed-2192230; Flannigan K.A., Hennigan S.H., Vogelbacker H.H., Gots J.S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-K12
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 384
                       1 GGLLVQD 7
GGLLVQD 390
                                               Similarity
7; Conserv
                                                 85.4%; Score 35; llarity 100.0%; Pred. No. Conservative 0; Mismatc
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                                                 red. No. 10;
Mismatches
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of Escherichia coli.";
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                                              Indels
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PUR9_BACSU
ID PUR9_BACSU
AC P12048;
DT 01-0CT-1989
DT 01-0CT-1989
DT 30-MAY-2000
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Pfam; PF01808; AICARFT_IMPCHas; 1.
Purine biosynthesis; Transferase; Hydrolase; Multifunctional enzyme.
SEQUENCE 532 AA; 58349 MW; 9DE1E241DD238E87 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fleischmann R.D., Adams M.D., White O., Clayton R.A., Kirkness E.F. Kerlavage A.R., Bult C.J., Tomb J.-F., Dougherty B.A., Merrick J.M. McKenney K., Sutton G., Fitzhugh W., Fields C.A., Gocayne J.D., Scott J.D., Shirley R., Liu L.-I., Glodek A., Kelley J.M., Weidman J.F., Phillips C.A., Spriggs T., Hedblom E., Cotton M.D., Utterback T.R., Hanna M.C., Nguyen D.T., Saudek D.M., Brandon R.C., Fitchman J.L., Fuhrmann J.L., Geoghagen N.S.M., Gnehm C.L., McDonald L.A., Small K.V., Fraser C.M., Smith H.O.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
30-NAY-2000 (Rel. 39, Last sequence update)
30-NAY-2000 (Rel. 39, Last annotation update)
BIFUNCTIONAL PURINE BIOSYNTHESIS PROTEIN PURH [INCLUDES:
PHOSPHORIBOSYLAMINOIMIDAZOLECARBOXAMIDE FORMYLTRANSFERASE (EC 2.1.2.3)
(AICAR TRANSFORMYLASE); IMP CYCLOHYDROLASE (EC 3.5.4.10) (INOSINICASE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Haemophilus influenzae.
Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                                                                                                      EMBL; U32770; AAC22544.1; TIGR; HI0887; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Influenzae Rd.";
Science 269:496-512(1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Whole-genome random sequencing and
influenzae Rd.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-RD / KW20 / ATCC
MEDLINE-95350630; PubMed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (IMP SYNTHETASE) (ATIC)].
PURH OR HI0887.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Venter J.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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                                                                                                                                                          387
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                                                                                                                                                                                                                                                              Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATALYTIC ACTIVITY: 10-FORMYLITETRAHYDROFOLATE + 5'-PHOSPHORIBOSYL-5'-AMINO-4-IMIDAZOLECARBOXAMIDE = TETRAHYDROFOLATE + 5'-PHOSPHORIBOSYL-5-FORMAMIDO-4 -IMIDAZOLECARBOXAMIDE.

CATALYTIC ACTIVITY: IMP + H(2)O = 5-FORMAMIDO-1-(5-PHOSPHORIBOSYL)
IMIDAZOLE-4-CARBOXAMIDE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGION (BY SIMILARITY).
SIMILARITY: BELONGS TO THE PURH FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DOMAIN: THE IMP CYCLOHYDROLASE ACTIVITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PATHWAY: NINTH AND TENTH STEP IN DE NOVO PURINE BIOSYNTHESIS. DOMAIN: THE IMP CYCLOHYDROLASE ACTIVITY RESIDES IN THE N-TERMINAL
                                                                                                                                                          GGLLVQD
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                                                                                                                                                                                                                                               Similarity
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(Rel.
(Rel.
(Rel.
                                                                                                                                                                                                                             Conservative
                                                                                                                                                          393
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                                                                     STANDARD;
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39,
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                                                                                                                                                                                                                                            85.4%;
100.0%;
Created)
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           subdivision; Pasteurellaceae;
                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            assembly of Haemophilus
                                                                     512
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10;
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                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                              Length 532
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RESULT
GUAN_HU
ID GU
AC QC
DT 01
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Best Local S
Matches 6
    GUAN_HUMAN
Q02747;
Q1-JUL-1993
Q1-JUL-1993
Q1-OCT-2000
GUANYLIN PRE
                                                                                                                                        LT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  chromosome: a region devoted to purine uptake and metabolism, and containing the genes cotA, gabP and guaA and the pur gene cluster within a 34960 bp nucleotide sequence.";
Microbiology 142:3027-3031(1996).

-: CAPALYTIC ACTIVITY: 10-FORMYLISTRAHYDROFOLATE + 5'-PHOSPHORIBOSYL-5-FORMANIDE - TETRAHYDROFOLATE + 5'-PHOSPHORIBOSYL-5-FORMANIDE - TETRAHYDROFOLATE + 5'-PHOSPHORIBOSYL-5-FORMANIDE - 5-FORMANIDE.

-: CAPALYTIC ACTIVITY: IMP + H(2)0 - 5-FORMAMIDO-1-(5-PHOSPHORIBOSYL)

-: PANHWAY: NINTH AND TENTH STEP IN DE NOVO PURINE BIOSYNTHESIS.

-: DOMAIN: THE IMP CYCLOHYDROLASE ACTIVITY RESIDES IN THE N-TERMINAL
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MEDLINE-87250425; PubMed-3036807;

Ebbole D.J., Zalkin H.;

"Cloning and characterization of a subtills encoding nine enzymes for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bacillus subtilis.
Bacteria; Firmicutes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BIFUNCTIONAL PURINE BIOSYNTHESIS PROTEIN PURH [INCLUDES: PHOSPHORIBOSYLAMINOIMIDAZOLECARBOXAMIDE FORMYLTRANSFERASE (AICAR TRANSFORMYLASE); IMP CYCLOHYDROLASE (EC 3.5.4.10)
                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; J02732; AAA22683.1;
EMBL; AF011544; AAB72185.1
EMBL; Z99107; CAB12472.1;
PIR; A29183; DTBSPH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Borriss R., Porwollik S., Schroeter R.; "The 52 degrees-55 degrees segment of the Bacillus subtilis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bacillus/Staphylococcus
NCBI_TaxID=1423;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PURH OR PURHJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR002695;
Pfam; PF01808; AICAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SubtiList; BG10710; purH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthesis."
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                                                                                                                                                                                                                               370
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                                                                                                                                                                                                                                                   1 GGLLVQD
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CE 512 AA;
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6; Conser
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(Rel. 26, Created)
(Rel. 26, Last sequence update)
(Rel. 40, Last annotation update)
ECURSOR (GUANYLATE CYCLASE ACTIVATOR
                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                               376
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hesis; Transferase;
AA; 55739 MW; 7FD
                                                                                                                    STANDARD;
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85
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                                                                                                                                                                                                                                                                                                               Score 34; DB
Pred. No. 16;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                            se; Hydrolase; Multifunctional 7FD6B0FE5485234C CRC64;
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16;
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L outstation
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Query Match
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EMBL; M95174; AAA58625.1; -.
PIR; A46279; A46279
PIR; S29228; S29228.
PDB; 1GNA; 30-SEP-94.
PDB; 1GNA; 30-SEP-94.
MIM; 139392; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRUCTURE BY NMR OF 101-115.

MEDLINE-95034794; PubMed-7947768;

KELLON N.J. Garcia K.C. Goeddel D.V., Quan C., Burnier J.P.;

Skelton N.J. Garcia K.C. Goeddel D.V., Quan C., Burnier J.P.;

Skelton N.J. Garcia K.C. Goeddel D.V., Quan C., Burnier J.P.;

Petermination of the solution structure of the peptide hormone guanylin: observation of a novel form of topological strengthen.";

Blochemistry 33:13581-13592(1994).

1- FUNCTION: ENDOGENOUS ACTIVATOR OF INTESTINAL GUANYLATE CYCLASE.

IT STIMULATES THIS ENZYME THROUGH THE SAME RECEPTOR BINDING REGION AS THE HEAT-57ABLE ENTEROTOXINS.

1- SIMILARITY: BELONGS TO THE GUANYLIN FAMILY. ALSO SIMILAR TO HEAT-STABLE BYTEROTOXINS.
                                                                                                                                                                                                    FRANTS; PRO0774; GUANYLIN. Signal; 3D-structure. SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a cleave of the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and fo entitles requires a license agreement (See http://www.isb-sib.entitles.requires a license agreement (See http://www.isb-sib.or.send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-93011964; PubMed-1327879; Wiegand R.C., Kato J., Huang M.D., Fok K.F., Kachur Currle M.G.; Hunan guanylin; cDNA isolation, structure, and acti FEBS Lett. 311:150-154(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 22-68.

MEDLINE-93178628; PubMed-8095028;

Kuhn M., Raida M., Adermann K., Schulz-Knappe P., Gerzer R.,

Heim J.-M., Forssmann W.-G.;

"The Circulating bloactive form of human guanylin is a high molecular weight peptide (10.3 kpa).";

Weight peptide (10.3 kpa).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GUCA2A OR GUCA2.
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
MCBI_TaxID=9606;
                                                                                                                                                           BULLABO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Precursor structure, guanylin.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE-93028409; PubMed-1409606;
de Sauvage F.J., Keshav S., Kuang W.J., Gillett N., Henzel W.,
Goeddel D.V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                        nterPro; IPR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Proc. Natl. Acad. Sci. U.S.A. 89:9089-9093(1992)
                                                                                                                                                                                                                                                                                                                    IPR000879; -.
                                                                    104
107
115
                                                                                 AA;
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12448
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115
115
112
   80,5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             expression, and tissue distribution of human
                                                                                 M.
Score 33;
                                                                                                                                                           GUANYLIN
                                                                                                                                                                                 HMW-GUANYLIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                          C644C03BAFFC26FA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (See http://www.isb-sib.ch/announce/
DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and activity.";
Length 115
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70 GGMMVKDG 77

1 GGLLVQDG 8

Query Match Best Local Matches

Similarity 5; Conser Conservative

80.5%;

Score 33; DB Pred. No. 16; 3; Mismatches

1. 0:

Length 309; Indels

0

Gaps

0;

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METEL METTM

METHLOGALAMIN SIDNOCKSTEINE METHAUFRANSFERASE (BC 2.1.1.-)

DE PROBALIE METHAED 1.

METHLOGALAMIN SIDNOCKSTEINE METHAUFRANSFERASE (BC 2.1.1.-)

DE PROBALIE METHLOGALAMIN SIDNOCKSTEINE METHAUFRANSFERASE (BC 2.1.1.-)

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DE METHLOGALAMIN SIDNOCKSTEINE METHAUFRANSFERASE (BC 2.1.1.-)

DE METHLOGALAMIN SIDNOCKSTEINE METHAUFRANSFERASE (BC 2.1.1.-)

MEDLINGS-GIGH 30.0 PLANDAG-GG17378,

REV METHLORD-GG17-ANDAG-GG17378,

REV METHLORD-GG17-ANDAG-GG17378,

REV METHLORD-GG17-ANDAG-GG17378,

RET J. BLOOKALAMIN AND METHLOGAGINAMIDE TO HOMOCYSTEINE RESULTING

COFACTOR: ZUGH EINDAG-GG17378,

RET SUBUNIT: MONOMER.

COFACTOR: ZUGH EINDAG-GG17378,

COFACTOR: Z
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                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss institute of Bioinformatics and the EMBD outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Schroeder I. Thauer R.K.;

Methylcobalamin:homocysteine methyltransferase from Methanobacterium thermoautotrophicum. Identification as the mete gene product.";

Eur. J. Biochem. 263:789-796(1999).

1- FUNCTION: CATALYZES THE TRANSFER OF A METHYL GROUP FROM METHYLCOBALAMIN AND METHYLCOBINAMIDE TO HOMOCYSTEINE RESULTING IN METHIONINE FORMATION.

1- COPACTOR: ZINC. BINDS ONE MOLE PER SUBUNIT (BY SIMILARITY).

1- PATHWAY: TERMINAL STEP IN THE DE NOVO BIOSYNTHESIS OF METHIONINE.

1- SUBUNIT: MONOMER.

1- SIMILARITY: BELONGS TO THE VITAMIN-B12 INDEPENDENT METHIONINE.

SYNTHASE FAMILY.
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1; Mismatches
DB . 16;
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Best Local S
Matches 6
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InterPro; IPR000939; -.
InterPro; IPR000978; -.
InterPro; IPR000978; -.
Pfam; PF00608; adeno_fiber2; 2.
Pfam; PF00541; adeno_fiber; 1.
PRINTS; PR00307; ADENOVSFIBRE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; X74659; CAA52723.1; -.
EMBL; X74658; CAA52722.1; -.
EMBL; X76706; CAA54127.1; -.
PIR; S37220; S37220.
PIR; S37214; S37214.
PIR; S40092; S40092.
                                                                                                                                                               C532_ECOLI STANDARD; PRT; 937 AA. P15484; P15485; P15486; P15487; 01-APR-1990 (Rel. 14, Created) 01-NOV-1995 (Rel. 32, Last sequence update) 01-NOV-1997 (Rel. 35, Last annotation update) 00TER MEMBRANE USHER PROTEIN CS3-2 PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADE09
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  SEQUENCE FROM STRAIN-PB176;
                                                                                                       Escherichia coli.
Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Virology 206:564-571(1995).
-I- FUNCTION: RECOGNIZES THE CELL
BETWEEN THE ADENOVIRUS CAPSID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WEDLING-95133193; PubMed-7831811; Pring-Akerblom P., Adrian T.; "Characteriestics"
                                                             NCBI_TaxID=562;
                                                                                        Escherichia
                                                                                                                                                    KDA PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fiber protein. SEQUENCE 362 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human adenovirus type 9
Viruses; dsDNA viruses,
VCBI_TaxID=10527, 28276
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15-DEC-1998 (Rel.
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75.0%;
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Pred. No. 18;
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                                                                                                          subdivision;
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SIGNAL 1 ?
CHAIN 7 937
CHAIN 181 753
CHAIN 317 753
CHAIN 451 753
CHAIN 452 753
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HYPOTHETICAL
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P45927;
                                                 SEQUENCE FROM N.A.
STRAIN-168 / JH642;
STRAIN-168 / JH642;
MEDLINE-95219086; PubMed-7704261;
Takemaru K.-I., Mizuno M., Sato T., Takeuchi M.,
"Complete nucleotide sequence of a skin element
rearrangement during sporulation in Bacillus sut
microbiology 141:323-327(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the European Bioinformatics Institute. There are no rest use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an entitles requires a license agreement (See http://www.isb-or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE-90158116; PubMed-2576094; Jalajakumari M.B., Thomas C.J., Halter R., Manning P.A. Talajakumari M.B., Thomas C.J., Halter R., Manning P.A. Tenes for biosynthesis and assembly of CS3 pili of CF enterotoxigenic Escherichia coli: novel regulation of production by bypassing an amber codon."; Mol. Microbiol. 3:1685-1695(1989).
            SEQUENCE FROM N.A.
STRAIN-168 / JH642
                                                                                                                                                                        Bacillus subtilis.
Bacteria; Firmicutes; Ba
Bacillus/Staphylococcus
                                                                                                                                                                                                                YQBK.
                                                                                                                                                           NCBI_TaxID=1423;
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ALTERNATIVE PRODUCTS: FIVE PROTEIN ARE PRODUCED BY ALTER INITIATION. THE FIFTH PROTEIN REQUIRES THE SUPPRESSION OR READTHROUGH OF AN INTERNAL AMBER CODON IN POSITION 754.

SIMILARITY: BELONGS TO THE FIMBRIAL EXPORT USHER FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FUNCTION: THIS PROTEIN IS ESSENTIAL
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                                                                                                                                                                                                                                                                                                                                                                GGILVYDG
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X16944; CAA34816.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity 6; Conser
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6 (Rel. 34, Last sequents
6 (Rel. 34, Last annotation II)
AL 32.7 KDA PROTEIN II
           / JH642;
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Mizuno
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KDA PROTEIN IN SPOIIIC-CWLA
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Masuda
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CS3 PILI SYNTHESIS 63 KDA PROTEIN.

CS3 PILI SYNTHESIS 63 KDA PROTEIN.

CS3 PILI SYNTHESIS 48 KDA PROTEIN.

CS3 PILI SYNTHESIS 33 KDA PROTEIN.

CS3 PILI SYNTHESIS 20 KDA PROTEIN.
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                                                                           Takeuchi M., Kobayashi
skin element excised by
Takemaru
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49;
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P15344; P78048;

01-APR-1990 (Rel. 14, Created)

10-APR-1990 (Rel. 14, Last sequence update)

30-MAY-2000 (Rel. 39, Last annotation update)

GMP REDUCTASE (EC 1.6.6.8) (GUANOSINE 5'-MONOPHOSPHATE

CXIDOREDUCTASE) (GUANOSINE MONOPHOSPHATE REDUCTASE).
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Medique C., Moszer I., Viari A., Danchin A.;

Medique C., Moszer I., Viari A., Danchin A.;

Medique C., Moszer I., Viari A., Danchin A.;

*Analysis of a Bacillus subtilis genome fragment using a co-operat computer system prototype.",

Gene 165:GC37-GC51(1995).

1- SIMILARITY: STRONG, TO B.SUBTILIS XKDK.

1- CAUTION: REF. 1 SEQUENCE DIFFERS FROM THAT SHOWN FROM POSITION ONWARD AND IS SHORTER (226 AA) DUE TO A FRAMESHIFT.
SEQUENCE FROM N.A.
STRAIN-K12 / MG1655;
MEDLINE-97426617; PubMed-9278503;
Blattner F.R., Plunkett G. III, Bloch C.A.,
                                                                                                                                                                         STRAIN-K12 / W3110;
MEDLINE-94261430; PubMed-8202364;
Fujita N., Wori H., Yura T., Ishihama A.;
Fujita N., Wori H., Yura T. Escherichia coli
"Systematic sequencing of the Escherichia coli
the 2.4-4. min (110,917-193,643 bp) region.";
Nucleic Acids Res. 22:1637-1639(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-89061679; PubMed-2904262;
Andrews S.C., Guest J.R.;
Nucleotide sequence of the gene encoding the Escherichia coli KI2.";
Biochem. J. 255:35-43(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; D32216; BAA06943.1; ALT_FRAME. EMBL; D84432; BAA12406.1; -. EMBL; 29917; CAB14549.1; -. SubtiList; BG11282; y9bk.
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Bacteria; Proteobacteria; gamma subdivision; Enterobacteriaceae;
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Pred. No. 25;
3; Mismatches
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   Perna N.T.,
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RESULT 12 SUN4_YEAST

SUN4_YEAST P53616; 01-OCT-1996

(Rel.

34, Created)

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ECOGENE: EG10422; guac.
InterPro; IPR001093; -.
Pfam; PF00478: IMPDH_N; 1
Pfam; PF01574: IMPDH_N; 1
PROSITE: PS00487; IMP_DH,
Oxidozeductase; NADP.
BINDING 186 28
NP_BIND 216 238
CONFLICT 233 234
SEQUENCE 346 AA; 3744C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; X07917; CAA30751.1; ...
EMBL; D26562; CAB20312.1; -..
EMBL; AE000119; AAC73515.1; -..
EMBL; L28105; AAC36926.1; -..
EMBL; S01671; S01671.
PIR; S45182; S45182.
HSSP; P50097; IAK5.
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Link A.J., Robison K., Ch....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Whitchurch C.B., Mattick J.S.; "Escherichia coli contains a set of genes homologous to those involved in protein secretion, DNA uptake and the assembly of type-4 fimbriae in other bacteria."; Gene 150:9-15(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "The complete genome sequence of Escherichia coli K-12."; Science 277:1453-1474(1997).
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GGMIVSDG 220
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Kirkpatrick H.A.,
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2; Mismato
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Plasmid pSymA (megaplasmid 1).
Bacteria; Proteobacteria; alpha subdivision; Rhizobiaceae group; Rhizobiaceae; Sinorhizobium.
NCBI_TaxID=382;
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"Sequencing a cosmid clon
reveals 12 new open readi
of six ORFs.";
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STRAIN-S288C / FY1676;
MEDLINE-96021608; PubMed-8533472;
MEDLINE-96021608; PubMed-8533472;
Bergez P., Doignon F., Crouzet M.;
"The sequence of a 44 420 bp fragment located chromosome XIV from Saccharomyces cerevisiae."
Yeast 11:967-974(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Saccharomyces cerevisiae (Baker's yeast).

Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
                                                                              NITROGEN FIXATION (EC 3.6.1.-).
                                                                                                                                                                                                                                                                                                                                                                            EMBL; U12141; AAA99645.1; -. EMBL; X86470; CAA60196.1; -. EMBL; Z71342; CAA95939.1; -. SGD; S0005010; SUN4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-97060022; PubMed-8904343; Bergez P., Dolgnon F., Crouzet M.; Yeast 12:297-297(1996).
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15-DEC-1998 (Rel.
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reading frames (ORFs) and an ancient duplication
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PIR; S39994; S39994.
PIR; S32847; S32847.
HSSP; Q27546; IMAS.
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MOD_RES
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-!- CATALYTIC ACTIVITY: ATP + H(2)0 = ADP + ORTHOPHOSPHATE.

-!- SUBCELLULAR LOCATION: INTEGRAL MEMBRANE PROTEIN.

-!- SIMILARITY: BELONGS TO THE CATION TRANSPORT ATPASES FAMILY (E1-E2 ATPASES). SUBFAMILY IB.
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InterPro; IPR001934; ...
Pfam; PF00122; E1-E2_ATPase;
Pfam; PF00403; HMA; 1...
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SEQUENCE FROM N.A.
STRAIN-RCR2011 / SU47;
MEDLINE-89123173; PubMed-2536685;
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                                     Score 32; DB Pred. No. 63; 3; Mismatches
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POTENTIAL.

PHOSPHORYLATION (PROBABLE)

DE2E5C6249254AA5 CRC64;
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RESULT 14

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TO 1.80V-1988 (Red. 09, Created)

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DT 01.80V-1988 (Red. 09, Last annotation update)

DT 01.80V-1988 (Red. 00, Last annotation update)

RT 180V-1988 (Red. 00, Last annotation update)

RT 180
                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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InterPro; IPR001314; -.
Pfam; PF00089; trypsin; l.
PRINTS; PR00722; CHYMOTRYPSIN,
PROSITE; PS00134; TRYPSIN, MER; l.
PROSITE; PS00135; TRYPSIN, MER; l.
Hydrolase; Serine protease; Zymo;
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EMBL; X55988; CAA40306.1
EMBL; X55988; CAA37373.1
EMBL; X14093; CAA32255.1
PIR; S01006; S01006.5
PIR; E26444; E26944.
PIR; B36172; B36172.
PIR; S2499; S2499.
PIR; S2499; S2499.
PIR; S2499; S2499.
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PIR; S2499; S259.
PIR; S2499; S269.
PIR; S2499; S269.
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01-NOV-1988 (Rel. 09, Last sequence update)
15-JUL-1998 (Rel. 36, Last annotation update)
15-JUL-1998 (Rel. 36, Last annotation update)
16-RANDYME F PRECURSOR (EC 3.4.21.-) (CYTOTOXIC CELL PROTEASE 4)
(CTL SERINE PROTEASE 3) (C134) (CYTOTOXIC SERINE PROTEASE 3) (Notation of the control of 
                                                                                                                                                                          SEQUENCE FROM N.A.
TISSUE-$Pleen;
MEDLINE-$1318146; PubMed-1861068;
MEDLINE-$1318146; PubMed-1861068;
Jenne D.E., Zimmer M., Garcia-Sanz J.A., Tschopp J.F., Lichter P.;
"Genomic organization and subchromosomal in situ localization of th
murine granzyme F, a serine protease expressed in CD8+ T cells.";
J. Immunol. 147:1045-1052(1991).
SEQUENCE FROM N.A. PubMed-1880801;
MEDLINE-91350184; PubMed-1880801;
Prendergast J.A., Pinkoski M., Wolfenden A., Bleackley R.C Prendergast J.A., Pinkoski M., Wolfenden C., Bleackley R.C Prendergast D.A., Pinkoski M., Wolfenden A., Bleackley R.C Prendergast D.A., Pinkoski M., Wolfenden A., Bleackley R.C. Prendergast D.A., Pinkoski M., Wolfenden A., Pinkoski M., Wo
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EMBL; M36902; AAA37488.1; EMBL; X56989; CAAA0307.1; EMBL; M96930; AAA37741.1; EMBL; J03257; AAA37738.1; EMBL; X12823; CAA31310.1; EMBL; X14094; CAA32256.1;
MEROPS; S01.401; -.

MGD; MGI:109254; Gzmf.

MGD; MGI:109254; Gzmf.

InterPro; IPR001314; -.

InterPro; IPR001314; -.

Pfam; PF00089; trypsin; 1.

PRINTS; PR00722; CHYMOTRYPSIN.

PROSITE; PS00134; TRYPSIN_HIS; 1.

PROSITE; PS00135; TRYPSIN_HES; 1.

PROSITE; PS00135; TRYPSIN_SER; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE OF 21-45.

SEQUENCE OF 21-45.

MEDILINE-93044519; Pubmed-2152187;

Jiang S., Hasselkus-Light C.S., Ojcius D.M., Young J.D.E.;

Purification of a membrane-associated serine esterase from murine cytotoxic T lymphocytes by a single reverse-phase column.";

Protein Expr. Purif. 1:77-80 (1990).

-I- FUNCTION: THIS ENZYME IS PROBABLY NECESSARY FOR TARGET CELL LYSIS IN CELL-MEDIATED IMMUNE RESPONSES.

-I- SUBCELLULAR LOCATION: CYTOPLASMIC GRANULES OF CYTOLYTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-Cytotoxic T-cell;
MEDLINE-89036001; PubMed-3053963;
Kwon B.S., Kestler D., Lee E., Wakul
"Isolation and sequence analysis of
cytolytic T lymphocytes.";
J. Exp. Med. 168:1839-1854(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE-88271600; PubMed-3292281; Bleackley R.C., Duggan B., Ehrman N., L "Isolation of two cDNA sequences which proteases."; FEBS Lett. 234:153-159(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                  HSSP; P04187; 2CP1
MEROPS: ""
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MEDLINE=87215932; PubMed=3555842;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <del>-</del>
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"A family of serine esterases in lytic granules of cytolytic T lymphocytes.";
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Jenne D.E., Rey C., Haefliger J.-A., Qiao B.-Y.,
Tschopp J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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serine protease cDNAs from mouse
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Q64822 human adeno
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Q20398 caenorhabdi
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Q9kv80 vibrio chol
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01-0CT-2000 (TrEMBLrel. 15, Created)
01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0CT-2000 (TrEMBLrel. 15, Last annotation update)
PHOSPHORIBOSYLAMINOIMIDAZOLECARBOXAMIDE FORMYLTRANSFERASE AND
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Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AF170176; AAF33520.1; -.
SEQUENCE 529 AA; 57467 MW; 5D713504AD644778 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. STRAIN-SGSC1412;
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Latreille, P;
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Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.
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01-MAI-ZOUDEIN.
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Arabidopsis thaliana (Mouse-ear cress).
Arabidopsis thaliana (Mouse-ear cress).
Enkaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Enkaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Magnoliophyta; eudicotyledons; core eudicots; Rosidae; eurosids II;
Magnoliophyta; Brassicaceae; Arabidopsis.
                                                                                                         SEQUENCE FROM N.A.

STRAIN-CV. COLUMBIA;

Lin X., Kaul S., Town C.D., Benito M., Creasy T.H., Haas B.,

Ronning C.M., Koo H., Fujii C.Y., Utterback T.R., Barnstead M.E.,

Bownan C.L., White O., Nierman W.C., Fraser C.M.;

Parabidopsis thaliana chromosome II BAC F2103 genomic sequence.*,

Submitted (CCT-1999) to the EMBL/GenBank/DDBJ databases.

EMBL; AC009853; AMF02157.1.

EMBL; AC009853; ASP02157.1.

SEQUENCE 620 AA; 68199 MW; 1F2D06A4A3972D9E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                            O9SRR3; PRELIMINARY; PRT; 620 AA.
O9SRR3; O1-MAY-2000 (TrEMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
STRAIN-ELT TOR N16961 / SEROTYPE 01;
STRAIN-ELT TOR N16961 / SEROTYPE 01;
MEDLINE-20406833; PubMed-10952301;
MEDLINE-20406833; PubMed-10952301;
Heidelberg J.F., Elsen J.A., Nelson W.C., Clayton R.A., Gwinn M.L.,
Dodson R.J., Hait D.H., Hickey E.K., Peterson J.D., Umayam L.A.,
Edill S.R., Nelson K.E., Read T.D., Tettelin H., Richardson D.,
Ermolaeva M.D., Vanathevan J., Beas S., Oln H., Dragoi I., Sellers P.,
McDonald L., Utterback T., Fleishmann R.D., Nierman W.C., White O.,
Salzberg S.L., Smith H.O., Colwell R.R., Mekalanos J.J., Venter J.C.,
Eraser C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09KV80; PRELIMINARY; PRT; 530 AA.

09KV80;
01-CCT-2000 (TrEMBLrel. 15, Created)
01-CCT-2000 (TrEMBLrel. 15, Last sequence update)
01-CCT-2000 (TrEMBLrel. 15, Last annotation update)
PHOSPHORIBOSYLAMINOIMIDAZOLECARBOXAMIDE FORMYLTRANSFERASE/IMP
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SEQUENCE 530 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nature 406:477-483(2000).
EMBL; AE004115; AAF93451.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Vibrio cholerae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "DNA sequence of both chromosomes cholerae.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AE004115; A. VC0276; -.
           similarity
6; Conser
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7; Conserv
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llarity 100.0%;
Conservative
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75.0%;
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           Score 35; DB
Pred. No. 70;
2; Mismatches
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     core 35; DB 2
Pred. No. 58;
Mismatches
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                                               DB 10;
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           0,
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                                                                                                                                                                     genomic sequence.";
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                                               Length 620;
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           Indels
       0;
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Best Local Similarity 100.0%;
Matches 7; Conservative
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EMBLIZ 26829; CAA92607 1; ...
INTERPRO; IPRO00619; ...
INTERPRO; IPRO01478; ...
PFAM: PF00695; PDZ; 1
PF005TTE; PS50052; GUANYLATE_KI
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                                                                                               OSXE26;
01-NOV-1999 (TrEMBLrel. 12, Created)
01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
HYPOTHETICAL 170, 8 KDA PROTEIN.
Oryza sativa (Rice)
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Magnoliophyta; Liliopsida; Poales; Poaceae; Oryza.
MCBI_TaxID=4530;
SEQUENCE FROM N.A.
STRAIN-CV. NIPOPONBARE;
Sasaki T., Watsumoto T., Yamamoto
"Oryza sativa nipponbare(GA3) geno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.

MEDILINE-94150718; pubMed-7906398;

Wilson R., Alnscough R., Anderson K., Baynes C., Berks M.,

Wilson R., Alnscough R., Anderson K., Baynes C., Berks M.,

Bonfield J., Burton J., Connell M., Copsey T., Cooper J., Coulson A

Craxton M., Dear S., Du Z., Durbin R., Favello A., Pulton L.,

Gardner A., Green P., Hawkins T., Hiller L., Jier M., Johnston L.,

Jones M., Kershaw J., Kirsten J., Laister N., Latteille P.,

Jones M., Kershaw J., Kirsten J., Laister N., Latteille P.,

Lightning J., Lloyd C., Mcmurray A., Mortimore B., O'Callaghan M.,

Parsons J., Percy C., Rifken L., Roopra A., Saunders D., Shownkeen I

Smaldon N., Smith A., Sonnhammer E., Staden R., Sulston J.,

Thierry-Mieg J., Thomas K., Vaudin M., Vaughan K., Waterston R.,

Watson A., Weinstock L., Wilkinson-Sproat J., Wohldman P.;

"2.2 Mb of contiguous nucleotide sequence from chromosome III of C.

elegans.";
                                                                                                                                                                                                                                                                                        Q9XE26
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Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
Rhabditidae; Peloderinae; Caenorhabditis.
NCBI_TaxID-6239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (DEC-1995)
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                                                                                                                                                                                                                                                                                                                                                                                     734 GLLVQDG
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||||::||
513 GGLLMEDG 520
                                                                                                                                                                                                                                                                                                                                                                                                                           2 GLLVQDG
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1034 AA; 116053 MW; 7E29646264FCD5BC CRC64;
                                                                                                                                                                                                                                                                                        PRELIMINARY;
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Last sequence update)
Last annotation updat
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Query Match Best Local Matches

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385 GGLLVQD

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Query Ma Best Loc Matches

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RESULT
Q9LHD1
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AC Q9
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Best Local S
Matches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Complete genome sequence.";
Nature 393:537-544(1998).
EMBL; 795557; CABO8933.1; -
TUBERCULIST; Rv3595c; -
INTERPRO; IPRO00084; -
INTERPRO; IPRO00087; -
PROM; PP0093; PE; 1.
PRODOM; PD001223; -; 1.
   Q9LHD1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-98295987; PubMed-9634230;
Cole S.T., Brosch R., Parkhill J., Garnier T., Churcher C., Harris D.,
Gordon S.V., Eiglmeier K., Gas S., Barry C.E. III, Tekala F.,
Badcock K., Basham D., Brown D., Chillingworth T., Connor R.,
Davies R., Devlin K., Feltwell T., Gentles S., Hamlin N., Holroyd S.,
Hornsby T., Jagels K., Krogh A., McLean J., Moule S., Murphy L.,
Oliver S., Osborne J., Quail M.A., Rajandram M.A., Rogers J.,
Rutter S., Seeger K., Skelton S., Squares S., Squares R., Sulston J.E.,
"Deciphering the biology of Mycobacterium tuberculosis from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1035
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Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; APO00364; BAA88178.1; -.
INTERPRO: IPR000477; -.
INTERPRO: IPR001878; -.
INTERPRO: IPR001978; -.
INTERPRO: IPR001969; -.
PFAM; PF00078; rvt; 1.
PFAM; PF00098; zf-CCHC; 1.
PFAM; PF00098; zf-CCHC; 1.
PFAM; PF00098; zf-CCHC; 1.
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01-JUL-1997 (TrEMBLrel. 14, Las
01-JUN-2000 (TrEMBLrel. 14, Las
01-JUN-2000 (TrEMBLrel. 14, Las
HYPOTHETICAL 37.1 KDA PROTEIN.
RV3595C OR MTCY07H7B.27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hypothetical protein SEQUENCE 439 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. STRAIN-H37RV;
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Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
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7; Conserv
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75.0%;
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87.5%;
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04, Last sequence update)
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Pred. No.
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Pred.
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                                          1240
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74;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 439;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
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Best Local
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01-AUG-1998 (TrEMBLTel. (
01-AUG-1998 (TREMBLTel. (
01-NOV-1998 (TREMBLTEL. (
H11E01.3 PROTEIN.
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                                                                                                                                                                                                                                                                              Wilson R., Ainscough R., Anderson K., Baynes C., Berks M.,
Bonfield J., Burton J., Connell M., Copsey T., Cooper J., Couls
Craxton M., Dear S., Du Z., Durbin R., Favello A., Fulton L.,
Gardner A., Green P., Hawkins T., Hillier L., Jier M., Johnston
Jones M., Kershaw J., Kirsten J., Laister N., Latreille P.,
Lightning J., Lloyd C., Mcmurray A., Mortimore B., O'Callaghan
Parsons J., Percy C., Rifken L., Roopra A., Saunders D., Shownk
Smaldon N., Smith A., Sonnhammer E., Staden R., Sulston J.,
Thierry-Mieg J., Thomas K., Vaudin M., Vaughan K., Waterston R.
Weinstock L., Wilkinson-Sproat J., Wohldman P.;
Watson A., Weinstock L., Wilkinson-Sproat J., Wohldman F.;
Watson A., Weinstock L., Wilkinson-Sproat J., Wohldman P.;
Watson A., Watson P., Watson P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
STRAIN-BRISTOL N2;
MEDLINE-94150718; PubMed-7906398;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation updat
MULTIDRUG RESISTANCE P-GLYCOPROTEIN.
Arabidopsis thaliana (Mouse-ear Cress).
                                                                                            STRAIN-BRISTOL
Geisel C., Wams
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Rhabditidae; Peloderinae;
NCBI_TaxID=6239;
[1]
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SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Caenorhabditis elegans.
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Kaneko T., Kato
                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                              Nature
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1 (MAY-2000)
                                                             (MAY-1998)
                                                                                               STOL N2;
Wamsley
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75.0%;
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08,
                                                             the EMBL/GenBank/DDBJ databases
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Caenorhabditis.
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Last sequence update)
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EMBL/GenBank/DDBJ databases
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dicots; Rosidae; eurosids II;
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                                                                                                                                                                                                                                                                                           III of C.
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Q 20 AC Q 20 A
              RESULT 10
P97157
ID P97157
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DT 01-MAY
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A partise M., Maiff B.B., Bonnema G., Thomas C.M., Jones D.A.,
Thomosylves of the Cf-9 disease resistance gene (Hcr9s) are present at
Moi. Flant Microbe Interact. 12:93-102(1999).
Mainf Microbe Interact. 12:93-102(1999).
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Best Local Similarity 75.0%;
Matches 6; Conservative
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Best Loc
Matches
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||:|| ||
1495 GGILVDDG 1502
P97157; PRELIMINARY; PRT; 303 AA. P97157; P7157; O1-MAY-1997 (TrEMBLrel. 03, Created) O1-MAY-1997 (TrEMBLrel. 03, Last sequence update)
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STRAIN-CV. MONEYMAKER;
**Parniske M., Jones J.D.G.;
**Recombination between diverged clusters of the tomato Cf-9 plant disease resistance gene family.*;
**proc. Natl. Acad. Sci. U.S.A. 0:0-0(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-BRISTOL N2; Waterston R.; Value of the EMBL/GenBank/DDBJ databases. Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases. EMBL, AF06722; AAC17017.1; -. C1C08ACBC6D6FF11 CRC64;
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STRAIN-CY, MONEYMAKER;
MEDLINE-99125234; PubMed-9926411;
Parniske M., Wulff B.B., Bonnema G., Thomas C.M., Jones D.A.,
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092584. O1-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-COT-2000 (TrEMBLrel. 15, Last annotation update)
POLYPROTEIN.
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Bukaryota; Vildiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Magnollophyta; eudicotyledons; core eudicots; Asteridae; euasterids I;
Solanales; Solanaceae; Solanum.
NCBL_TaxID-4081;
                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GGLLVQDG 8
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920 GGVLVQEG 927
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6; Conservative
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Pred. No. 3.3e+02;
2; Mismatches 0; Indels
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Pred. No. 3.2e+02;
1; Mismatches 1;
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064823
AC 064823
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                                                                                                                                           SEQUENCE FROM N.A.

STRAIN-GW, AND ME;

A Arrberg N. Mei Y.-F., Wadell G.;

A Arrberg N., Mei Y.-F., Wadell G.;

R EMBL; U5913; AAB71733.1; -.

R EMBL; U5913; AAB71733.1; -.

R EMBL; U5913; AAB71733.1; -.

R HSSP; P11818; IKNB.

R HSSP; P11818; IKNB.

R INTERPRO, IFR000931; -.

R INTERPRO, IFR000931; -.

R INTERPRO, IFR000939; -.

R INTERPRO, IFR000939; -.

R PFAM: PF00561; adeno_fiber: 1.

R FPAM: PF00561 adeno_fiber: 1.
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Best Local Similarity 75.0%;
Matches 6; Conservative
       Query Match
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MEDILINE-90158116; PubMed-2576094;
MEDILINE-90158116; PubMed-2576094;
Jalajakumari M.B., Thomas C.J., Halter R., Manning P.A.;
Jalajakumari M.B., Thomas C.J., Halter R., Manning P.A.;
Ganes for biosynthesis and assembly of CS3 pili of CFA/II
enterotexispenic Escherichia coli: novel regulation of pilus production
by bypassing an amber codon."
Mol. Microbiol. 3:1685-1695(1989).
EMBL: X16944; CA34818.1;
INTERPRO; IPROGO015;
I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      064823 PRELIMINARY; PRT; 365 AA.
064823; 01.NOV.1996 (TERMBLEE). 01, Created)
01.NOV.1996 (TERMBLEE). 01, Last sequence update)
01.MAY-2000 (TERMBLEE). 13, Last annotation update)
FIBER PROTEEN.
Human adenotirus type 37.
VILUSES; dSDMA VIRUSES, no RNA stage; Adenoviridae; Mastadenovirus.
USUSES; dSDMA VIRUSES, no RNA stage; Adenoviridae; Mastadenovirus.
(11.75xID-36437;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ol-OCT-2000 (TrEMBLrel. 15, Last annotation update)
33 KDA PROTEIN.
Escherichia coli.
Bacteria; Proteobacteria; gamma subdivision; Enterobacteriaceae,
Escherichia.
Escherichia.
Escherichia.
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SSRAIN-GW. A.D ME:
MEDLINE-97157339; PubMed-9007080;
Arnbarg N. Mal Y. F., Wadell G.
Piber genes of adenoviruses with tropism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          103 GGILVYDG 110
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STRAIN-PB176;
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PROPERTY FROM P., Heim A., Trijssenaar F.E.J.;
Submitted (MAR-1996) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rology 227:239-244(1997).
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                                                                                                                                   365 AA; 40092 MW;
       80 5%, Score 33,
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Best Local S
Matches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A Arnberg N. Mei Y.-F., Wadell G.;
L Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases.
R EMBL; 394485; CAA642311; -.
R EMBL; U69130; AAB71732.1; -.
R HSSP; p11818; IKNB.
R INTERPRO; IPR000931; -.
R INTERPRO; IPR000939; -.
R INTERPRO; IPR000939; -.
R INTERPRO; IPR000939; -.
R INTERPRO; IPR000939; -.
R PFAM; PF00541; adeno_fiber; 1.
R PFAM; PF00508; adeno_fiber; 2.
R PFAM; PF00507; ADENOVSFIBRE.
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Matches 6; Conserv
                                                                     Allium tuberosum.
Eukaryota; Viridiplantae;
Magnollophyta; Liliopsida
                                                                                                                           01-JUL-1997 (TrEMBLrel. 04, Created)
01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
01-CCT-2000 (TrEMBLrel. 15, Last annotation update)
ALLIINASE (EC 4.4.1.4) (ALLIIN LYASE) (CYSTEINE SULPHOXIDE LYASE).
                                                                                                                                                                                                            004927
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WCBI_TaxID=28278;
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     SEQUENCE FROM N.A. Manabe T., Saito K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=97167539; PubMed=9007080;
Arnberg N., Mei Y.F., Wadell G.;
"Fiber genes of adenoviruses with tropism for the eye and the genital
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pring-Akerblom P., He Submitted (MAR-1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                           NCBI_TaxID-4683;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Virology 227:239-244(1997).
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                                                                                                                                                                                                                                                                                                                                                                                               Similarity 75.06; Conservative
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                                                                                                                                                                                                                               PRELIMINARY;
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                                                                             Liliopsida;
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6) to
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                                                                                                Embryophyta;
                                                                               Asparagales;
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EMBL/GenBank/DDBJ d
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                                                                                                                                                                                                                               PRT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E7B99E50EBB38FAF CRC64;
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                                                                           Tracheophyta; ; Alliaceae; Al
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     RESULT
Q9RW35
ID Q9
AC Q9
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X2 Cole S.T., Brosch R., Parkhill J., Garnier T., Churcher C., Harris I.
X3 Cordon S.V., Eiglmeier K., Gas S., Barry C.E. III, Tekaia F.,
X4 Gordon S.V., Eiglmeier K., Gas S., Barry C.E. III, Tekaia F.,
X5 Badcock K., Basham D., Brown D., Chillingworth T., Connor R.,
X6 Davies R., Devlin K., Feltwell T., Gentles S., Hamlin N., Holroyd S.,
X7 Aborne J., Quail M.A., Rajandream M.A., Rogers J.,
X8 Coliver S., Osborne J., Quail M.A., Rajandream M.A., Rogers J.,
X8 Rutter S., Seeger K., Skelton S., Squares S., Sqares R., Sulston J.F.
X8 Taylor K., Whitehead S., Barrell B.G.;
X9 "Deciphering the biology of Mycobacterium tuberculosis from the
X9 "Deciphering the biology of Mycobacterium tuberculosis from the
X1 complete genome sequence.";
X1 Nature 393:337-544(1998).
X1 Nature 393:337-544(1998).
X1 Nature 393:37-544(1998).
X1 Nature 393:37-544(1998).
X1 Nature 393:37-544(1998).
X1 Nature 393:37-544(1998).
X2 Nature 393:37-544(1998).
X3 Nature 393:37-544(1998).
X4 Nature 393:37-544(1998).
X6 Nature 393:37-544(1998).
X8 Nature 393:37-544(1998).
X9 Nature 393:37-544(1998).
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Best Local
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Best Local
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01-JUN-1998 (TREMBLIFE). 0
1-OCT-2000 (TREMBLIFE). 1
PGRS-FAMILY PROTEIN.
RV0872C OR MTV043.55C.
   Q9RW35;
Q9RW35;
01-MAY-2000
01-MAY-2000
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053884;
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SEQUENCE
                                                                                                                                                                                                                                                                                                                  PFAM; PF00934; PE; 1. PRODOM; PD001223; -; SEQUENCE 606 AA; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mycobacterium tuberculosis.
Bacteria; Firmicutes; Actinobacteria;
Actinomycetales; Corynebacterineae; My
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SULFENATE + 2 AMINOCRYLATE.
-!- COFACTOR: PYRIDOXAL-PHOSPHATE.
EMBL; AB004269; BAA20358.1; -.
MENDEL; 16931; Alltu;1125;16931.
INTERPRO; IPRO00561; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases. -- -- -- -- -- CATALYTIC ACTIVITY: AN S-ALKYL-L-CYSTEINE S-OXIDE --
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-H37RV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00022; PRODOM; PD014435;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=1773;
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                                                                                                                                                                                                                         6; Conserv
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5; Conserv
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   (TrEMBLrel.
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Pred. No. 1.7e
1; Mismatches
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Last sequence update)
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Search completed: June 13, 2001, 14:20:37 Job time: 737 sec
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It Science 286:1571-1577(1999).
REMBL; AE001937; AAF10412.1; -.
RETIGR; DR0834; -.
RETIGR; DR0935; CNMP_binding; 1.
REPFAM; PF00325; CNMP_binding; 1.
REPFAM; PF00325; CTP; 1.
REPFAM; PF00325; CTP; 1.
REPFAM; PF00325; CMP_BINDING_3; 1.
REPFAM; PF00325; CMP_BINDING_3; 1.
REPFAM; PF00325; CMP_BINDING_3; 1.
REPFAM; PF00325; CMP_BINDING_3; 1.
                                                                                                                                                                   Query Match 78.0
Best Local Similarity 75.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-20036896; PubMed-10567266; White O., Elsen J.A., Heidelberg J.F., Hickey E.K., Peterson J.D., White O., Elsen J.A., Heidelberg J.F., Helsen W.C., Richardson D.L., Dodson R.J., Haft D.H., Gwinn M.L., Nelson W.C., Richardson D.L., Moffat K.S., Qin H., Jiang L., Pamphile W., Crosby M., Shen M., Wenathevan J.J., Lam P., McDonald L., Utterback T., Zalewski C., Makarova K.S., Aravind L., Dally M.J., Minton K.W., Fleischmann R.D., Ketchum K.A., Nelson K.E., Salzberg S., Smith H.O., Venter J.C., Fraser C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
NITROGEN REGULATOR, PUTATIVE.
DR0834.
Deinococcus radiodurans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. STRAIN-R1;
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NCBI_TaxID=1299;
                                                                                           1 GGLLVQDG 8
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121 GGIHVQDG 128
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75.0%;

    Mismatches

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Result
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Listing first 45 summaries
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Perfect score:
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length: 2000000000
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Match
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1: /cgn2_6/ptodata/2/1aa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/1aa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/1aa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/1aa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/1aa/FCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/1aa/backfiles1.pep:*
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US-08-774-169-3
US-08-859-931A-4
US-08-851-974-4
US-08-851-974-4
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US-09-006-632-1
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US-09-004-731-2
US-09-004-731-5
US-09-749-699-5
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US-08-749-699-5
US-08-749-699-5
US-08-741-327E-11
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Sequence 4, Appli
Sequence 3, Appli
Sequence 4, Appli
Sequence 10, Appl
Sequence 108, Appl
Sequence 38, Appl
Sequence 38, Appl
Sequence 95, Appl
Sequence 8, Appli
Sequence 8, Appli
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Sequence 92, Appli
Sequence 93, Appli
Sequence 94, Appli
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Sequence 97, Appli
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29 29 70.7 511 1 US-08-413-418-17 31 29 70.7 551 3 US-09-120-365-5 32 29 70.7 552 3 US-09-120-365-5 32 29 70.7 674 1 US-08-317-522A-3 33 29 70.7 674 2 US-08-751-965-3 34 29 70.7 674 2 US-08-751-965-3 35 29 70.7 674 2 US-08-788-975-3 36 29 70.7 674 2 US-08-788-626-3 37 29 70.7 674 4 US-08-808-599A-3 38 29 70.7 749 1 US-08-317-522A-2 39 29 70.7 749 1 US-08-317-522A-2 40 29 70.7 749 2 US-08-719-65-2 41 29 70.7 749 2 US-08-718-965-2 42 29 70.7 749 2 US-08-728-626-2 43 29 70.7 749 2 US-08-728-626-2 44 29 70.7 749 2 US-08-728-626-2 45 29 70.7 1408 1 US-08-628-521-2 46 29 70.7 1408 1 US-08-618-521-2 47 28 68.3 27 2 US-08-709-874A-1	4	4	4	4	4	4	ω	w	ω	w	ω	ω	ω	ω	ω	w	N
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1 US-08-413-118-17 3 US-09-120-365-5 1 US-08-317-522A-3 1 US-08-317-522A-3 1 US-08-751-965-3 2 US-08-751-965-3 2 US-08-788-975-3 3 US-08-788-975-3 4 US-08-808-599A-3 1 US-08-317-522A-2 1 US-08-718-975-2 2 US-08-718-975-2 2 US-08-718-975-2 1 US-08-612-521-2 1 US-08-612-521-2 2 US-08-709-874A-1	27	1408	749	749	749	749	749	749	674	674	674	674	674	674	552	511	511
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ALIGNMENTS

US-07-903-029-4 Sequence 4, Application Patent No. 5969097 GENERAL INFORMATION: APPLICATION NUMBER: US/07/ FILING DATE: 19920623 CLASSIFICATION: 530 ATTORNEY/AGENT INFORMATION: NAME: Bennett, Dennis A. REGISTRATION NUMBER: 34,54 TELEFAX: (314)694-9009 INFORMATION FOR SEQ ID NO: TOPOLOGY: linear MOLECULE TYPE: protein '-903-029-4 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: TITLE OF INVENTION: Human Guanylin NUMBER OF SEQUENCES: 6 CORRESPONDENCE ADDRESS: ADDRESSEE: Dennis A. Bennett, Monsanto STREET: 800 N. Lindbergh Blvd. SEQUENCE CHARACTERISTICS: LENGTH: 115 amino acids TYPE: AMINO ACID TELECOMMUNICATION INFORMATION: TELEPHONE: (314)694-5402 APPLICANT: Wiegand, Roger APPLICANT: Currie, Mark C. APPLICANT: Fok, Kam F. STREET: 800 N. L CITY: St. Louis STATE: Missouri COUNTRY: USA REFERENCE/DOCKET NUMBER: 63167 Application US/07903029 (314)694-9009 US/07/903,029 34,547 4. ? 07-21(872)A

20 GGVTVQDG 27

1 GGLLVQDG 8 6 Similarity

Conservative

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Score 33; Pred. No.

Length 115; Indels

Mismatches

0; Gaps

US-07-903-029-5

Sequence 5, Application US/07903029 Patent No. 5969097

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NAME: Bennett, Dennis A.
REGISTRATION NUMBER: 34,547
REFERENCE/DOCKET NUMBER: 07-2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (314)694-5402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (314)694-9009
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                           APPLICANT: Hillman, Jennifer L.
TITLE OF INVENTION: A NOVEL GUANOSINE MONOPHOSPHATE REDUCTASE NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
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20 GGVTVQDG 27
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC competible
OPERATING SYSTEM: PC-DOS/MS-DOS
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ADDRESSEE: Dennis A. Bennett, Monsanto Co., A3SG
STREET: 800 N. Lindbergh Blvd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Wiegand, Roger C.
APPLICANT: Currie, Mark C.
APPLICANT: FOk, Kam F.
TITLE OF INVENTION: Human Gu
                                                                                                                                       STREET: 3174 POI
CITY: Palo Alto
STATE: CA
                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
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FILING DATE: 19920623
CLASSIFICATION: 530
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                                                                                                        94304
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                                                                                                                                                               E: Incyte Pharmaceuticals, Inc. 3174 Porter Drive
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                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (314)694-9009
(317) TD NO: 5:
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Pred. No. 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 115;
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; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: GenBank
; CLONE: 473772
US-08-774-169-3
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Best Local Similarity
Watches 5; Conserv:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-859-931A-4
                                                                             COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: pc-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/859,931A
FILING DATE: 21 MAY 1997
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 30,764
REFERENCE/DOCKET NUMBER: A-6901
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAX: (202) 293-7860
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 4, Application US/08859931A Patent No. 5945510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: FASANO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 346 amino acids
TYPE: amino acids
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ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0
TELEPANICATION INFORMATION:
TELEPHONE: 415-855-0555
TELEPEX: 415-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
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                                                                       TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                              STREET: 2100 Penns
CITY: Washington,
                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                20037
                                                                                                                                                                                                                                                                                                                                                                     D.C.
                                                                                                                                                                                                                                                                                                                                                                          2100 Pennsylvania Avenue, N.W., Suite 800 ashington, D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FASANO, Alessio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            SUGHRUE, MION, ZINN, MACPEAK & SEAS
                                                                      (202) 293-7060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Herewith
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62.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MAMMALIAN TIGHT JUNCTIONS
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Pred. No.
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RESULT 6
US-09-213-390-4
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US-08-859-931A-4
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US-08-851-974-4
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Best Local
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Best Local Similarity
Matches 6; Conserv
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                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/8:
FILING DATE: Filed Herewith
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: DOS
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
US/08/851,974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 247 amino acids
                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 415-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Hillman, Jennifer L.
APPLICANT: COrley, Neil C.
APPLICANT: Shah, Purvi
TITLE OF INVENTION: HUMAN SERINE PROTEASE PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
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8 GGVLVQPG 15
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les 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Billings, Lucy J. REGISTRATION NUMBER: 36,749
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                                                                                                                                                                                                                                                                                           TYPE: amino acid
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                                                                                                    1 GGLLVQD 7
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                                                                          GGFLIQD 56
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                                                                                                                                    Conservative
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75.0%;
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71.4%;
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Pred. No.
                                                                                                                                              Score 30; DB 2;
Pred. No. 1.4e+02;
                                                                                                                                    Mismatches
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Best Local S
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                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
                                                                                                                                      TITLE OF INVENTION: TRANSGENIC PLANTS CONTAINING MULTIPLE TITLE OF INVENTION: DISEASE RESISTANCE GENES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IMMEDIATE SOURCE:
LIBRARY: GenBa
CLONE: 306682
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LENGTH: 247 amino acids
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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ADDRESSEE: Incyte Pharmaceuticals,
STREET: 3174 Porter Drive
COMPUTER READABLE FORM:
                                                                                                        CORRESPONDENCE ADDRESS:
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                                                                                                                     NUMBER OF SEQUENCES:
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                             COUNTRY:
                                               STATE:
                                                         CITY: Los Angeles
                                                                         STREET:
                                                                                                                                                                                                                                                                                                                                             50 GGFLIQD 56
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REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: UZIP: 94304
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STATE: CA
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                                                                                         ADDRESSEE:
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5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amino acid
                                                                                                                                                                                                                                                               Application US/08093372
                                            CA
                                                                         E: Pretty, Schroeder, Brueggemann & Clark 444 South Flower Street, Suite 2000
                                                                                                                                                                   Maher, Eileen A.
Dixon, Richard A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
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Pred. No. 1.4e+02
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                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
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Query Match
Best Local Similarity
Matches 5; Conserve
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                                                               TELEX: 66141 PENNIE
NFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Baldwin, Geraldine F.
REGISTRATION NUMBER: 31,232
REFERENCE/DOCKET NUMBER: 7809-019
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9990
TELEPHONE: (212) 790-9990
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TELEPAX: 619-546-9392
NFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ Version 2.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Shoseyov, (APPLICANT: Shani, Ziv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: 619-546-4737
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NAME: Reiter, Stephen E.
REGISTRAFION UNMBER: 31,192
REFERENCE/DOCKET NUMBER: P41
               TYPE: amino a STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ITLE OF INVENTION: ARABIDOPSIS THALIANA ENDO-1,4-BETA-
ITLE OF INVENTION: GLUCANASE GENE, PROMOTER AND PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         234 GVMVQDG 240
                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM:
SOFTWARE: FastSEC
                                                                                                                        TELEFAX:
                                                                                                                                                                                                                                                CLASSIFICATION:
                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 10036-2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: New York
STATE: NY
                                                  ENGTH:
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TOPOLOGY: linear
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                              amino acid
                                             492 amino acids
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1155 Avenue of the Americas
                                                                                                                        (212) 869-8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    368 amino acids
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SYSTEM: DOS
linear
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N: 800
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71.4%;
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Pred. No. 2.1e+02;
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                Sequence 10, Application US/08482677 Patent No. 6017714 GENERAL INFORMATION:
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Best Local S
Matches 6
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                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 492 amino acids
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APPLICANT:
    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 78
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                   1 GGLLVQDG 8
||||:|
328 GGLLVKTG 335
                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Baldwin, Geraldine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Shpigel, Etai
TITLE OF INVENTION: TRANSGENIC PLANTS OF ALTERED
MORPHOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              328 GGLLVKTG 335
                                                                                                                                                                            Local Similarity
nes 6; Conserv
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TOPOLOGY: lir
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/006,632
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nes 6; Conserv
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                                                                                                                                                                                                                                                                                                       amino acid
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Tessier-Lavigne, Marc
                                                                                                                                                                                                                                                                           linear
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75.0%;
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75.08;
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Pred. No. 2.
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Pred. No. 2.9e+02;
1; Mismatches 1
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APPLICANT: Dodd, Ja

Jessel, Thomas

Jane

Netrins

Kennedy, Timothy Placzek, Marysia Serafini, Tito

NUMBER OF SEQUENCES:

APPLICANT: APPLICANT: APPLICANT:

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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-482-677-10
                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
US-08-545-809A-108
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                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: HONJO, TASUKU
APPLICANT: MESUda, Fumihiko
APPLICANT: MESUda, Fumihiko
TITLE OF INVENTION: HUMAN IMMUNOGLOBULIN VH GENE
TITLE OF INVENTION: SEGMENTS AND DNA FRAGMENTS CONTAINING THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (415) 343-4342
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
           COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                 COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: UC
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 343-4341
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                         STATE: MA
                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188 GGLLAFSVQDG 198
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APPLICATION NUMBER:
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T: 268 BUSH STREET, SUITE 3200
SAN FRANCISCO
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72.7%;
US/08/545,809A
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Pred. No. 4.2e+02;
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Best Local Similarity
"~*~hes 6; Conserve
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                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US
APPLICATION NUMBER: PCT/US
FILING DATE: 29-OCT-1993
ATTORNEY/AGENT INFORMATION:
NAME: HOWELLS, SLACY L.
14.84
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SEQUENCE CHARACTERISTICS:
                                                             TELEFAX: (619) 455-511
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/428,197
                                                                                                             REGISTRATION NUMBER: 34,842
REFERENCE/DOCKET NUMBER: FD
TELECOMMUNICATION INFORMATION:
TELECHONE: (619) 455-5100
                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 10-MAY-1993
ATTORNEY/AGENT INFORMATION:
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MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Spensley Horn Jubas & Lubitz
STREET: 1880 Century Park East - Suite 500
CITY: Los Angeles
STATE: California
                         TYPE: amino acid
                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                 FILING DATE:
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27 GGALVQPG 34
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TELEX: 20015
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REFERENCE/DOCKET NUMBER:
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amino acid
bGY: linear
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                                               123 amino acids
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VENTION: METHOD FOR STIMULATING PRODUCTION OF VENTION: VARIABLE REGION GENE FAMILY RESTRICTED ANTIBODIES THROUGH VENTION: VACCINATION WITH A B-CELL SUPERANTIGEN AND CONJUGATES
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Pred. No. 1e+02;
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Best Local Similarity
Matches 6; Conserve
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                                                                                  Patent No. 6177258 GENERAL INFORMATION:
                                                                                                   Sequence 95, Application US/09004731 Patent No. 6177258
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GENERAL INFORMATION
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Best Local
                                     APPLICANT:
APPLICANT:
        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (619) 455-5110
NFORMATION FOR SEQ ID NO: 38:
SEQUENCE CHARACTERISTICS:
LENGTH: 123 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: TAM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Howells, Stacy L.
REGISTRATION NUMBER: 34,842
REFERENCE/DOCKET NUMBER: FD
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                                                                                                                                                                                                 8 GGTLVQPG 15
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les 6; Conserv
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GY: linear
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                                Wu Hunter, Shirley
Stiegler, Gary
Gaines, Patrick J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application PC/TUS9310555
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1880 Century Park East - Suite 500
                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-OCT-1993
                                                                                                                                                                                                                                                                             70.7%;
FLEA PROTEASE PROTEINS, NUCLEIC ACID MOLECULES AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 METHOD FOR STIMULATING PRODUCTION OF VARIABLE REGION GENE FAMILY RESTRICTED ANTIBODIES THROUGH VACCINATION WITH A B-CELL SUPERANTIGEN AND CONJUGATES
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75.0%;
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Pred. No. 1e+02;
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Pred. No. 1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                   Sequence 95
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (303) 863-0223
INFORMATION FOR SEQ ID NO:
                                                                          COMPUTER READABLE FORM:
MEDLIM TYPE: Floppy disk
COMPUTER: IBM FC COMPUTER: OPERATING SYSTEM FC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                           SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                 APPLICANT: Wu Hunter, Shirley
APPLICANT: Stiegler, Gary
APPLICANT: Gaines, Patrick J.
ATTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Connell, Gary J.
REGISTRATION NUMBER: 32,0
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 220 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy
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CORRESPONDENCE ADDRESS:
                CLASSIFICATION:
                                APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                           CITY: Denver
STATE: Color
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STREET: 1700 Lincoln Street, Suite 3500
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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CITY: Denver
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5. 6210920
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Maximum Match 100%
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L: /SIDS6/gcgdata
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SIDS6/gcgdata/geneseq/geneseqp/AA1981.DAT:

SIDS6/gcgdata/geneseq/geneseqp/AA1981.DAT:

SIDS6/gcgdata/geneseq/geneseqp/AA1983.DAT:

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SIDS6/gcgdata/geneseq/geneseqp/AA1985.DAT:

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   Y79125
W88384
W88389
B41718
B41638
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Human Zneul EGF-li
Human Zneul partia
Human ORFX ORF1482
Human ORFX ORF1402
Human Zneul partia
Human Zneul partia
Human normal uteru
Human TANGO 125b (
Human ORFX ORF1968
                                                                                                                                                                                                          Description
                                                                                                                                                       Peptide antagonist
Human Zneul EGF-li
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•	17	17	5	21	20	16	16	20	20	20	21	21	21	21	21	21	21	20	21	21	21	21	21	21	21	21	21	21	21	20	20	20	20
	R97324	R97323	R49514	Y79130	W94487	R82833	W73953	88098W	W86076	W86096	Y79127	Y79121	Y79117	¥79126	Y79113	B41644	B44241	Y41685	Y52137	в01376	B24044	B24043	B24042	B18675	B18674	в18673	B44327	B44326	B44325	W88381	4177	Y41770	417
Arcab tit	Humanised monocion	ised	-3	Human adult heart	Human adult heart	rminal of C17	2	Peptide from human	from	from huma	antagonis	ide antagonis	ide	ide antagonis	a	ORF140	PRO213	PRO213 pro	ANGO	n-associa	PRO1449 pro	PRO1	PRO21	acid	acid	o acid sec	PRO1449	PR01330 p	PRO213-	rowt	PRO1449 pro	PRO1330 pro	Human PRO213-1 pro

ALIGNMENTS

Y79125 RESULT

Y79125 standard; Peptide;

8 AA

Peptide antagonist of zonulin. 05-JUN-2000 (first entry)

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Zonulin; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antiulcer; antiviral; antibacterial; cytostatic; anti-HIV; vulnerary; antiallergic;
                                                                                                                                                                            hypotensive; immunosuppressive; antipar
gastrointestinal inflammation; therapy
                  WPI; 2000-205565/18
                                                                             03-AUG-1998;
                                                                                                                   17-FEB-2000.
                                                                                                                                      WO200007609-A1.
                                                                                                                                                         Synthetic
                                                         (UYMA-) UNIV MARYLAND BALTIMORE
                                                                                                28-JUL-1999;
                                                                             98US-0127815
                                                                                                99WO-US16683
                                                                                                                                                                                      antiparasitic; vasotropic;
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New peptide antagonist of zonulin useful as antiinflammatory agent for

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RESULT
W88384
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Best Local S
Matches 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mucosal erosion or ulcerations, e.g. gastritis, gastric cancer, collagenous colitis, inflammatory bowel disease, diseases marked by lymphatic obstruction, e.g. congenital intestinal lymphangiectasia, sarcoldosis lymphoma, mesenteric tuberculosis, and after surgical correction of congenital heart disease with Fontan's operation, mucosal diseases without ulceration, e.g. Menetrier's disease, coeliac disease, eosinophilic gastroenteritis, and immune diseases, e.g. systemic lupus erythematosus or food allergies, primarily to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This present sequence is that of a peptide antagonist of zonulin (Z), one of 25 such peptides (see Y79105-29) of the invention, which bind to a zonula occludens toxin (ZOT) receptor, yet do not physiologically modulate the opening of mammalian tight junctions (TJ). The peptide antagonists are based on a common motif of ZOT and human zonulins, which is believed to be critical for receptor and human zonulins.
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antibody; epidermal growth factor; EGF.
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                                                                                                                 18-JUN-1997;
18-JUN-1997;
                                                                                                                                                                                                                                                             23-DEC-1998
                                                                                                                                                                                                                                                                                                                    W09857983-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                zneu-1; neuro-growth factor-like protein; human; breast cancer
glioblastoma; pituitary adenoma; Alzheimer's disease; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human Zneul EGF-like
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                                                       (ZYMO ) ZYMOGENETICS
                                                                                                                                                                                                      18-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
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ilarity 100.0%;
Conservative
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Jelinek LJ,
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                                                                                                              97US-0878322.
97US-0050143.
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                                                          INC.
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Lehner JM,
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Pred. No. 3.2e+05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  meningitis, encephalomyelitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    fertility;
   Sheppard PO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
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W888389
IID 888389
IID 888389
IID 8888
AC W88
AC W8
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Best Local S
Matches 7
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                                                                                                                                                                                   Blumberg
Whitmore
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New mammalian Zneul polypeptides - used to, e.g. treat Alzheimer's disease, cancer and to repopulate blood cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This peptide comprises the first epidermal growth factor-like domain (EGF-1), i.e. amino acid residues 105-135, of human Zneul (see W88381), a new neuro-growth factor-like protein. Zneul can used as a growth, maintenance, or differentiation factor in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 6; Page 53; 70pp; English.
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  Claim 6; Page 57; 70pp; English
                                                    New mammalian Zneul disease, cancer and
                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09857983-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zneu-1; neuro-growth factor-like protein; human; breast cancer;
glioblastoma; pituitary adenoma; Alzhelmer's disease; therapy;
nerve regeneration; haematopoiesis; fertility; contraception;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human Zneul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-APR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diagnostic assays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Whitmore TE;
                                                                                                                                 WPI; 1999-095324/08
                                                                                                                                                                                                                                                                 (ZYMO ) ZYMOGENETICS INC
                                                                                                                                                                                                                                                                                                                     18-JUN-1997;
18-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                  18-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity 7; Conserv
                                                                                                                                                                                   Ή,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                               Jelinek LJ,
                                                                                                                                                                                                                                                                                                                     97US-0878322
97US-0050143
                                                                                                                                                                                                                                                                                                                                                                                                     98WO-US12763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polypeptide.
                                                       polypeptides
to repopulate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       87.8%;
87.5%;
                                              repopulate blood
                                                                                                                                                                                                                  Lehner JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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Pred. No. 3
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                                                                                                                                                                                                                  Sheppard
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3.5;
                                                          to, e.g. treat Alzheimer's cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1;
                                                                                                                                                                                                                    РО
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            bе
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B41718
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 7
                                                                                                                       31-MAR-1999;
02-APR-1999;
05-APR-1999;
30-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                      Human: open reading frame; ORFX; detection; cytostatic; hepatotropic; vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective; anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant; immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive; dermatological; immunosuppressive; antiinflammatory; antiviral; antibacterial; antifungal; antirheumatic; antithyroid; antitanaemic; gene therapy; cancer; proliferative disorder; hypertension; neurodegenerative disorder; osteoarthritis; graft vs host disease; cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS; cholesterol ester storage; systemic lupus erythematosus; infection; severe combined immunodeficiency; malaria; autoimmune disorder; asthma; allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound; bond disorder; asthma; antitificanaemic.
WPI; 2000-602362/57
N-PSDB; C75927.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-FEB-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B41718 standard; Protein; 115 AA
                                                                                                                                                                                                                                                                                      WO200058473-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human ORFX ORF1482 polypeptide sequence SEQ ID NO: 2964.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                 31-MAR-2000; 2000WO-US08621.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   diagnostic assays.
                                                                                    (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11 |||||
10 ggscvqpg 17
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                                                  RΑ,
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                                                                                                                                                                                                                                                                                                                                                          contraceptive.
                                                                                                                                                                                                                                                                                                                                                                       cartilage damage; antiinflammatory
                                                                                                                       99US-0127728
2000US-0540763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ą
                                                  Leach M;
                                                                                                                                                           99US-0127607
99US-0127636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        87.8%;
87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 43; DB;
Pred. No. 7.4;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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Query Match
Best Local S
Matches 7
                                                                                                                                                                                                                               dermatological; immunosuppressive; antiinflammatory; antibacterial; antifurgal; antifungal; antirheumatic; antifutyroid; and antianaemic. The sequences can be used for determining the presence of or predisposition to, or preventing or treating pathological conditions associated with an ORFX-associated disorder. The nucleic acids can be used to express ORFX proteins in gene therapy vectors. The proteins and nucleic acids may be used to treat cancers, proliferative disorders, neurodegenerative disorders, osteoarthritis, graft vs host disease, cardiovascular disease, cardiovascular disease, cardiovascular disease, systemic lupus erythematosus, severe combined immunodeficiency (SCID), AIDS, viral, bacterial or fungal infection, malaria, autoimmune disorders, asthma, allergies, applastic annemnia, burns, wounds, bone and cartilage damage, nocturnal haemoglobinuria, antiinflammatory disease; to enhance coagulation; to inhibit thrombosis; and as a contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antipsoriatic; antiparkinsonian; nootropic; neuroprotective; osteopathic; anticonvulsant; antiarthritic; immunosuppressant; immunostimulant; cardiant; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     represent the human ORFX open reading frames 1 to 3161. The (sequences have activities such as: cytostatic; hepatotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C74446 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel nucleic acids and peptides derived from open reading useful for treating e.g. cancers, proliferative disorders, neurodegenerative disorders and cardiovascular disease -
                                                                                                                                                                         Sequence
   Similarity 7; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C77606 encode the
                                                                                                                                                                         115
       Conservative
                                                                                                                                                                         AA;
                                   87.8%;
87.5%;
Score 43; DB Pred. No. 11; 0; Mismatches
       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            proteins given in B40237 to B43397, which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           English.
                                                                      21;
       ۲,
                                                                   Length 115;
       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The ORFX
       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                vulnerary;
       Gaps
       0
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B41638
ID B
Human ORFX ORF1402 polypeptide sequence SEQ ID NO:2804
                                             B41638;
                                                                   B41638 standard; Protein; 153
                       08-FEB-2001
                                                                                                                           19
                                                                                          5
                                                                                                                        ggscvqpg
                      (first entry)
                                                                                                                           26
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Human; open reading frame; ORFX; detection; cytostatic; hepatotropic; vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective; anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant; immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive; dermatological; immunosuppressive; antiinflammatory; antiviral; antibacterial; antifungal; antifheumatic; antithyroid; antianaemic; gene therapy; cancer; proliferative disorder; hypertension; neurodegenerative disorder; osteoarthritis; graft vs host disease; cardiovascular disease; diabetes mellitus; hypothyroidism, SCID; AIDS; cholesterol ester storage; systemic lupus erythematosus; infection; severe combined immunodeficiency; malaria; autoimmune disorder; asthma; allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound; bone damage; cartilage damage; antiinflammatory disease; coagulation; thrombosis; contraceptive.

31-MAR-2000; 2000WO-US08621

Homo

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RESULT
W88388
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CC C74446 to C77606 encode the proteins given in B40237 to B43397, which CC represent the human ORFX open reading frames 1 to 3161. The ORFX CC sequences have activities such as: cytostatic; hepatotropic; vulnerary; CC antipsoriatic; antiparkinsonian; nootropic; neuroprotective; osteopathic; cradiant; thrombolytic; coagulant; vasotropic; neuroprotective; osteopathic; CC cardiant; thrombolytic; coagulant; vasotropic; antidabetic; hypotensive; cardiant; thrombolytic; coagulant; vasotropic; antidabetic; hypotensive; cradialization; antifungal; antifungal; antifungal; antifungal; antifungal; antifungal; antishematory; antibacterial; cradialization; and proteins in genetial pathological conditions associated with an CC proteins in gene therapy vectors. The proteins and nucleic acids may be CC disorders, osteoarthrifis, graft vs host disease, neurodegenerative condisorders, systemic lupus erythematosus, severe combined immunodeficiency considers, systemic lupus erythematosus, severe combined immunodeficiency contiders, sathma, allergies, aplastic anaemia, burns, wounds, bone and contraceptive.
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                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                               Matches
    18-JUN-1998;
                                                                                                         Zneu-1; neuro-growth factor-like protein; human; breast cancer;
glioblastoma; pituitary adenoma; Alzheimer's disease; therapy;
nerve regeneration; haematopolesis; fertility; contraception;
                                                         W09857983-A2
                                                                                    Homo sapiens
                                                                                                                                                                                     Human
                                                                                                                                                                                                                                                          W88388 standard; Protein; 158
                                                                                                                                                                                                              26-APR-1999
                                                                                                                                                                                                                                                                                                                                          91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 11; Page 2044; 5507pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel nucleic acids and peptides derived from open reading frame X, useful for treating e.g. cancers, proliferative disorders, neurodegenerative disorders and cardiovascular disease -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAR-1999;
02-APR-1999;
05-APR-1999;
30-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                               1 GGGCVOPG 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CURA-) CURAGEN CORP.
                                                                                                                                                                        Zneul partial polypeptide.
                                                                                                                                                                                                                                                                                                                                     ggscvqpg 98
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DB; C75847.
                                                                                                                                                                                                                                                                                                                                                                                             Similarity
7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                           153 AA;
                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                       Conservative
98WO-US12763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0127607.
99US-0127636.
99US-0127728.
2000US-0540763.
                                                                                                                                                                                                                                                                                                                                                                                                   87.8%;
87.5%;
                                                                                                                                                                                                                                                                                                                                                                                Score 43; DB;
Pred. No. 14;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                           21;
                                                                                                                                                                                                                                                                                                                                                                                                      Length 153;
                                                                                                                                                                                                                                                                                                                                                                              Indels
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RESULT
W88390
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                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
         Blumberg H,
                                                  18-JUN-1997;
18-JUN-1997;
                        (ZYMO ) ZYMOGENETICS INC
                                                                                    18-JUN-1998;
                                                                                                        23-DEC-1998
                                                                                                                                                                  Zneu-1; neuro-growth factor-like protein; human; breast cancer;
glioblastoma; pituitary adenoma; Alzheimer's disease; therapy;
nerve regeneration; haematopoiesis; fertility; contraception;
                                                                                                                             W09857983-A2
                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                     Human Zneul partial polypeptide.
                                                                                                                                                                                                                                                 26-APR-1999
                                                                                                                                                                                                                                                                          W88390;
                                                                                                                                                                                                                                                                                          W88390 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                              95 ggscvqpg 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 6; Page 56; 70pp; English.
                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 87.1
les 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New mammalian Zneul polypeptides – used disease, cancer and to repopulate blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-095324/08
                                                                                                                                                                                                                                                                                                                                                           1 GGGCVQPG 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ZYMO ) ZYMOGENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-JUN-1997;
18-JUN-1997;
                                                                                                                                                                                                                                                                                                                    7
     Jelinek LJ,
                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                            158 AA;
                                               97US-0878322.
97US-0050143.
                                                                              98WO-US12763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jelinek LJ,
                                                                                                                                                                                                                                                                                     Protein; 169 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97US-0878322.
97US-0050143.
                                                                                                                                                                                                                                                                                                                                                                                                 87.88;
   Lehner JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lehner JM,
                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                           Score 43; DB
Pred. No. 14;
                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
Sheppard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sheppard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     to, e.g. treat Alzheimer's cells
                                                                                                                                                                                                                                                                                                                                                                                                      20;
                                                                                                                                                                                                                                                                                                                                                                                1;
                                                                                                                                                                                                                                                                                                                                                                                                   Length 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This claimed polypeptide comprises amino acid residues 105-273 of CC the human Zneul mature protein (see W88382), i.e. the 2 epidermal CC growth factor-like domains (see also W88384), i.e. the 2 epidermal CC growth factor-like domain of Zneul Zneul is a new neuro-growth CC factor-like protein that can be used as a growth, maintenance, or CC differentiation factor in the spinal cord, heart, spleen, testis, CC thyroid and lymph nodes. Zneul may also play a role in breast CC cancer, gliobiastomas, and pituitary adenomas. Zneul can be used to treat Alzheimer's disease, cancer, to repopulate blood cells after chemotherapy, to stimulate myofibroblast proliferation, CC fertility and contraception, or to regenerate nerves. Claimed CC Incul polypeptides (see also W88382-97), including specific domains CC facul and epitope-bearing portions of Zneul, can be used to raise specific antibodies for use e.g. in diagnostic assays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disease,
           Claim
                               New nucleic acid sequences expressed in normal uterine tissues, derived polypeptides, for treatment of uterine cancer and identification of therapeutic agents -
                                                                                      N-PSDB;
                                                                                                                                                                            17-APR-1998;
                                                                                                                                                                                                                                                      DE19817946-A1
                                                                                                                                                                                                                                                                                                                                          Human normal uterus tissue derived protein 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim
                                                                                    WPI; 1999-591956/51
N-PSDB; Z41336.
                                                                                                                          Rosenthal A,
                                                                                                                                                                                                     17-APR-1998;
                                                                                                                                                                                                                              21-OCT-1999
                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                      19-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                              Y59870;
                                                                                                                                                                                                                                                                                                                                                                                                                      Y59870 standard; Protein; 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New mammalian Zneul disease, cancer and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-095324/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Whitmore TE
                                                                                                                                                                                                                                                                                                                   Human; uterus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10
                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                      expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ggscvqpg 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGCVQPG 8
         23; Page 134; 154pp; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Page 57-58; 70pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   169 AA;
                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                          Specht
                                                                                                                                                                            98DE-1017946
                                                                                                                                                                                                                                                                                                       sequence
                                                                                                                                                                                                     98DE-1017946
                                                                                                                                                                                                                                                                                                                   cancer;
                                                                                                                                                   GES GENOMFORSCHUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polypeptides - used to repopulate blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                87.8%;
87.5%;
                                                                                                                                                                                                                                                                                                                  treatment;
                                                                                                                                                                                                                                                                                                       tag
                                                                                                                           Hinzmann B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 43; DB Pred. No. 15; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                       ₽
                                                                                                                                                                                                                                                                                                                  anticancer; cytostatic;
                                                                                                                                                    MBH.
                                                                                                                          Schmitt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          to, e.g. treat Alzheimer's cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 169
                                                                                                                          Pilarsky
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                  gene therapy;
                                                                                                                          'n
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                                                                                                                          Dahl E;
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RESULT
Y52139
    Query Match
Best Local Similarity
Thehes 7; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CC This invention describes novel cDNA sequences (A) highly expressed in cormal uterine tissue which can have anticancer and cytostatic activity cand can be used for gene therapy. (A) are used (i) for recombinant complete genes. (C) and can be used for gene therapy. (A) are used (i) for recombinant complete genes. (C) the are used (i) to identify agents suitable for treatment of uterine cancer; (ii) directly for treating this form of cancer (including compession from gene therapy vectors) and (iii) for generation of compectific antibodies. (A) are identified by assembling ESTS (expressed sequence tags) from a particular tissue type before comparison of compenses of the particular tissue type before comparison of the gene to be revealed, so should reduce the number of failures associated with the fact that ESTS from different libraries may represent compenses of the same unknown gene, distorting the estimated componency of occurrence in a particular tissue. Y5988-Y5982 represent compenses of fragments represented in Z41325-Z41385.
Y52138-Y52140 are amino acid sequences of spliced variants of TANGO 125 (T125). The T125 protein (Y52137) has two epidermal growth factor (EGF)-like domains at amino acids 107-134 and 141-176 and is predicted to have a molecular weight of approximately 30kD. T125 is predicted to have no transmembrane domains and appears to be a secreted protein. The sequences of all variants of T125 are used in the invention to create antibodies which selectively bind to T125. The T125 polypeptide is used
                                                                                                                                                             Novel polynucleotides and cellular processes -
                                                                                                                                                                                                            WPI; 2000-013240/01.
N-PSDB; Z37133.
                                                                                                                                                                                                                                                                                                                          23-APR-1998;
23-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 secreted protein; agonist; antagonist; predictive medicine; forensic biology.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TANGO 125; T125; alternative splice variant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                               Example 4; Fig 6; 120pp;
                                                                                                                                                                                                                                                            Holtzman DA
                                                                                                                                                                                                                                                                                        (MILL-) MILLENNIUM BIOTHERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                        23-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                        28-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                      W09954437-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human TANGO 125b (T125b) amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Y52139 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65 ggscvqpg 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGGCVQPG 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                          98US-0065363
99US-0065363
                                                                                                                                                                                                                                                                                                                                                                        99WO-US08900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          87.8%;
87.5%;
                                                                                                                               English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               247
                                                                                                                                                                            polypeptides used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EGF domain; antibody;
                                                                                                                                                                            modulate a variety
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 224;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treatment;
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This polypeptide comprises human zneul mature polypeptide. is a new neuro-growth factor-like protein (see also W88381).
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                                                                  disease,
                                             Claim 6;
                                                              New mammalian Zneul
disease, cancer and
                                                                                            WPI; 1999-095324/08
                                                                                                                                             (ZYMO ) ZYMOGENETICS INC
                                                                                                                                                                     18-JUN-1997;
18-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                    18-JUN-1998;
                                                                                                                                                                                                                        23-DEC-1998.
                                                                                                                                                                                                                                                                                                             Domain
                                                                                                                                                                                                                                                                                                                                Domain
                                                                                                                                                                                                                                                                                                                                                                                                            Zneu-1; neuro-growth factor-like protein; human; breast cancer;
glioblastoma; pituitary adenoma; Alzheimer's disease; therapy;
nerve regeneration; haematopolesis; fertility; contraception;
                                                                                                                                                                                                                                                                                                                                                                Domain
                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human neuro-growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-APR-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W88382 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            to modulate a variety of cellular processes. It can be used to produce fusion proteins. The protein may also be used to produce antibodies, and identify T125 antagonists and agonists. The T125 polynuclectides, predictive medicine; and methods of treatment of T125 associated disorders. The T125 polynuclectides can be used in screening assays; to detect T125 mRNA; to detect genetic alterations in the T125 gene; in forensic biology; and as a source of primers and probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              88 ggscvqpg 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GGGCVQPG 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity es 7; Conserv
                                                                                                                    TE;
                                           Page 48-49;
                                                                                                                          Jelinek LJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          247 AA;
                                                                                                                                                                  97US-0878322.
97US-0050143.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                98WO-US12763
                                                                                                                                                                                                                                                                                   /note= "(
159..254
                                                                                                                                                                                                                                                                         /note=
                                                                                                                                                                                                                                                                                                                         /note= "hydrophilic domain (HSM1), homologous
an HSMHÇ3W5A domain "
                                                                                                                                                                                                                                                                                                                  /note=
                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                        polypeptides – used
to repopulate blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Protein; 254 AA.
                                    70pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  factor-like protein Zneul mature polypeptide
                                                                                                                                                                                                                                                                                                         . 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             87.8%;
87.5%;
                                                                                                                                                                                                                                                                                                        ___epidermal growth factor-like
                                                                                                                                                                                                                                                                                  "epidermal growth factor-like domain 2"
                                                                                                                                                                                                                                                              "domain HSM2 homologous to an HSMHC3W5; domain"
                                                                                                                        Lehner JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 43; DB
Pred. No. 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                   Sheppard PO;
                                                    to, e.g. treat Alzheimer'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21; Length 247;
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Zneu1
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KW Human; open reading frame; ORFX; detection; cytostatic; hepatotropic;
KW vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
KW anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
KW immunostimulant; thrombolytic; coagulant; vasotropic; antidabetic;
KW hypotensive; dermatological; immunosuppressive, antiinflammatory;
KW antiviral; antibacterial; antifungal; antirheumatic; antithyrold;
KW antianaemic; gene therapy; cancer; proliferative disorder; hypertension;
KW enrodegenerative disorder; osteoarthritis; graft vs host disease;
KW cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KW cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KW cholesterol ester storage; systemic lupus erythematosus; infection;
KW severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
KW severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
KW allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
KW bone damage; cartilage damage; antiinflammatory disease; coagulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
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                                                                                                                    31-MAR-1999;
02-APR-1999;
05-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CC closest human homologue is HSMHC3W5A, a gene in the HLA class III CC zneul is also homologues to Notch 4. In its EGF-like domains and may CC adult tissues, with high expression in heart, placenta, spleen, cc a growth, maintenance, or differentiation factor in the spinal cord and lymph node. Zneul can be used as CC cord, heart, spleen, testis, thyroid and lymph nodes. It may CC cord, heart, spleen, testis, thyroid and lymph nodes. It may CC cord, heart, spleen, testis, thyroid and lymph nodes. It may CC cord, heart, spleen, testis, thyroid and lymph nodes. It may CC cord, heart, spleen, testis, thyroid and lymph nodes. It may CC cancer, to repopulate blood cells after chemotherapy, to stimulate CC myofibroblast proliferation, stimulate or inhibit growth factors and ein the placenta, in fertility and contraception, or to including specific domains of Zneul polypeptides (see also W88382-97), Z Zneul, can be used to raise specific antibodies for use e.g. in
                                                                                              31-MAR-1999; 99US-0127607.
02-APR-1999; 99US-0127636.
05-APR-1999; 99US-0127728.
30-MAR-2000; 2000US-0540763.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                          (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
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                                                                                                                                                                                                                                                                      W0200058473-A2
                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human ORFX ORF1968 polypeptide sequence SEQ ID NO:3936.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-FEB-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B42204 standard; Protein; 265
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hes
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                              RA,
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                          Leach M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    254 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      87.8%;
87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 43;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
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22;
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0,

WPI; 2000-602362/57

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                                                                                                                                                                                                                                                                                                                                                                                  RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 7; Conser
   10 MAR-1998
11 - MAR-1998
11 - MAR-1998
11 - MAR-1998
12 - MAR-1998
13 - MAR-1998
17 - MAR-1998
20 - MAR-1998
20 - MAR-1998
                                                                                                                                                                                                                                                Human;
probe;
                                                                                                                                                                                                                                                                                                                                                                                                                   1 GGGCVQPG 8
|| |||||
114 ggscvqpg 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel nucleic acids and peptides derived from open reading useful for treating e.g. cancers, proliferative disorders, neurodegenerative disorders and cardiovascular disease -
                                                                                                                                       08-MAR-1999;
                                                                                                                                                               16-SEP-1999
                                                                                                                                                                                    W09946281-A2
                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                   secreted protein;
                                                                                                                                                                                                                                                                                 Human PRO213-1 protein sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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                                                                                                                                                                                                                                             PRO; EST; expressed sequence tag; PCR primer; hybridisation; blood coagulation disorder; cancer; cellular adhesion disorder;
                                                                                                                                                                                                                                                                                                                                                          standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              265 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                          (first entry)
 98US-0077450
98US-0077641
98US-0077641
98US-0077764
98US-0077791
98US-0078004
98US-0078086
98US-0078086
98US-0078036
                                                                                                                                       99WO-US05028
                                                                                                                                                                                                                                                                                                                                                          Protein;
                                                                                                                                                                                                                                   transmembrane protein.
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87.5%;
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31-APR 1998
 98US-0081070
98US-0081171
98US-0081171
98US-00811203
98US-00812569
98US-008181817
98US-00812568
98US-0082568
98US-0082706
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98US-0083322
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98US-0084641
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98US-0080333
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98US-0079294
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RESULT

Y41770

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XX Y4170

XX Y4170

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XX Hui

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11-MAR-1998;
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17-MAR-1998;
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                                                                                                                                                                                                                                        Human; PRO; EST; expressed sequence tag; PCR primer; hybridisation; probe; blood coagulation disorder; cancer; cellular adhesion disorder; secreted protein; transmembrane protein.
                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                Human PRO1330 protein sequence.
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                                                                                                                                                                                                                                                                                                                                                                       Y41770 standard; Protein; 273
                                                                                                                                                                                                                                                                                                                                                          Y41770;
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                                                                                                                                                                                                                                                                                                                                                                                                                                              114
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114 ggscvqpg 121
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28-MAY-1998;
30-JUL-1998;
11-SEP-1998;
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ful for treating blood coagulation disorders,
esion disorders -
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DB; Z34311.
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                            98US-0077450

98US-0077632

98US-0077641

98US-0077649

98US-0077791

98US-0078004

98US-0040220

98US-0078886

98US-0078910
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87.5%;
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15-APR-1998

15-APR-1998

15-APR-1998

15-APR-1998

21-APR-1998

21-APR-1998

22-APR-1998

22-APR-1998

22-APR-1998

23-APR-1998

23-APR-1998

29-APR-1998

30-APR-1998

07-MAY-1998

07-MAY-1998
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08-APR 1998
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28-MAY-1998;
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30-JUL-1998;
11-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes secreted and transmembrane polypeptides and their polynucleotides. The nucleotide sequences are useful as sources of probes, primers, for chromosome mapping, and for generation of antisense sequences. They can also be used to create transgenic animals. The proteins can be used to treat a variety of diseases and disorders, depending on their function. Diseases that may be treated include blood coagulation disorders and cellular adhesion disorders. They may also be used to raise antibodies. 233891 to 234338, and Y41685 to Y41774 represent polynucleotide and polypeptide sequence given in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GGGCVQPG 8
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114 ggscvqpg 121
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N-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Y41771 standard;
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                                                                                                                                                08-MAR-1999;
                                                                                                                                                                                16-SEP-1999
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                                                                                                                                                                                                                                                                                                                                             Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        secreted and transmembrane polypeptides and their polynucleotides, ful for treating blood coagulation disorders, cancers and cellular esion disorders -
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DB; Z34312.
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7; Conserv
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 98US-0077450.
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98US-0094651.
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87.5%;
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RESULT 15
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Best Local :
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                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                           Zneu-1; neuro-growth factor-like protein; human; breast cancer; glioblastoma; pituitary adenoma; Alzheimer's disease; therapy; nerve regeneration; haematopoiesis; fertility; contraception;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human neuro-growth factor-like protein Zneul.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W88381;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes secreted and transmembrane polypeptides and their polypucleotides. The nucleotide sequences are useful as sources of probes, primers, for chromosome mapping, and for generation of antisense sequences. They can also be used to create transgenic disorders, depending on their function. Diseases that may be treated include blood coagulation disorders, cancers and cellular adhesion 234338, and y41685 to y4174 represent polynucleotides. 23391 to sequence given in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W88381 standard; Protein; 273 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              114
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New secreted and transmembrane polypeptides and useful for treating blood coagulation disorders, adhesion disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-MAY-1998;
22-MAY-1998;
28-MAY-1998;
28-MAY-1998;
28-MAY-1998;
30-JUL-1998;
11-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wood WI,
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DB; Z34313.
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7; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              273 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                      105..135
/note= "epidermal growth factor-like domain 1"
136..177
                                                                                                                                                         /note=
20..10
                                                                                                                                                                                                    /note=
20..273
                                                                                                                                                                                                                                              Location/Qualifiers
1..19
                                                                                                                                   /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0087208.
98US-0094651.
98US-0100038.
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98US-0086486.
98US-0087098.
98US-0087106.
                                                                                                                                                         104
                                                                                                                                                                                                  . 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             87.8%;
87.5%;
                                                                                     "hydrophilic domain (HSM1), homologous to
an HSMHC3W5A domain "
                                                                                                                                                                                                       _"putative signal peptide'
"epidermal growth factor-like domain 2"
                                                                                                                                                                     "mature protein"
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Pred. No.
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23;
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CC like protein. Its amino acid sequence was deduced from the contained protein. Its amino acid sequence was deduced from the contained protein. Its amino acid sequence was deduced from the contained protein contained from a comparison of a cDNA clone isolated from a comparison contained in the HLA class III region, which is contained in a cosmid comparison of the contains when a comparison of the contains when a cosmid comparison contains and may be involved in EGF receptor pathways. The comparison is contained in a cosmid comparison of the contains and may be involved in EGF receptor pathways. The placenta, spleen, testis, thyroid, splinal cord and lymph comparison in contained in the splinal cord, heart, spleen, testis, concer, comparison in comparison of contained and lymph nodes. It may also play a role in breast cancer, comparison comparison of contained and pituitary adenomas. Theul may be used to treat comparison of contained containe
  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This polypeptide comprises human Zneul, a new neuro-growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disease,
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N-PSDB; V84341.
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Whitmore TE;
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18-JUN-1997;
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  273
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ΑA;
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/note= "c
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Search completed:
Job time: 663 sec
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                                     ggscvqpg
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      June 13,
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87.5%;
     2001, 14:25:44
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Pred. No. 23;
                                                                Mismatches
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Minimum
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Maximum Match 100%
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Perfect score:
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re greater than or equal to the score of the result being printed,
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Gapop 10.0 , Gapext 0.
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Copyright (c) 1993 - 2000 Comp
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keratin high-sulfu vil ig heavy chain vil ig heavy 
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 Similarity 85. 6; Conservative
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45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
										79.6					
100	100	100	100	98	98	98	98	98	98	98	98	98	98	98	98
N	N	N	N	N	N	2	N	N	N	N	N	N	N	N	N
S26926	S26925	S69896	PL0122	S54856	S26934	S26933	S26889	S26894	S26891	S29543	S26932	S26927	S29546	S29545	S26896
Ig	Ig	Ig	Ig	Ig	. Ig	Ig	Ig	Ig	Ig	Ig	Ig	ĘI	Ig	Ig	Ig
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Ig heavy chain	Ig heavy chain	_				_	heavy	heavy	heavy		heavy			Ĺ	
Ig heavy chain V	Ig heavy chain V	_				heavy	heavy	heavy	heavy	heavy	heavy	heavy chain	heavy	heavy	heavy

ALIGNMENTS

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C;Accession: A02841
R;Swart, L.S.; Haylett, T.
Blochem. J. 133, 641-654, 1973
A;Title: Studies on the high-sulphur proteins of reduced merino wool. Amino acid sequ A;Reference number: A90269; MUID:74022242
A;Accession: A02841
A;Molecula type: protein
A;Residues: 1-130 <SWA>
A;Experimental source: Merino wool
C;Superfamily: keratin high-sulfur matrix protein IIIA
C;Keywords: duplication; hair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R:Smith, D.R.; Doucette-Stamm, L.A.; Deloughery, C.; Lee, H.; Dubois, J.; Aldredge, T. Qiu, D.; Spadafora, R.; Vicaire, R.; Wang, Y.; Wierzbowski, J.; Gibson, R.; Jiwani, ki, S.; Church, G.M.; Daniels, C.J.; Mao, J.; Rice, P.; Noelling, J.; Reeve, J.N. J. Bacteriol. 179, 7135-7155, 1997

A:Title: Complete genome sequence of Methanobacterium thermoautotrophicum Delta H: fu A:Reference number: A69000; MUID:98037514

A:Reference number: A69001

A:Status: preliminary; nucleic acid sequence not shown; translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                keratin high-sulfur matrix protein IIIA3A - sheep
C;Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C;Date: 24-Apr-1984 #sequence_revision 24-Apr-1984 #text_change 16-Aug-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: DNA
A;Residues: 1.145 <MTH>
A;Residues: 1.145 <MTH>
A;Cross-references: GB:AE000803; GB:AE000666; NID:g2621179; PIDN:AAB84645.1; PID:g262
A;Cross-references: strain Delta H
C;Genetics:
A;Gene: MTH139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C; Accession: H69051
R; Smith, D.R.; Douce
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                              81.6%;
85.7%;
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Score 40; DB 1; Pred. No. 6.3; 1; Mismatches
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0;

Indels

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Gaps

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keratin high-sulfur matrix protein IIIA3, major component - goat
N;Alternate names: M2.6 protein
C;Species: Capra aegagrus hircus (domestic goat)
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 16-Aug-1996
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                                                                                                                                                                                                                                                                                                                                         A;Molecule type: protein
A;Molecule type: protein
A;Residues: 1-131 <JOU>
A;Experimental source: Angora breed
C;Comment: Wool and hair consist of microfibrils embedded in a rigid matrix of other proc;Superfamily: keratin high-sulfur matrix protein IIIA
C;Keywords: duplication; hair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        J. S. Afr. Chem. Inst. 28, 250-263, 1975
A;Title: Studies on the high-sulphur proteins of
A;Reference number: A92978
A;Accession: B92978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                keratin high-sulfur matrix protein IIIA3, minor component - goat N;Alternate names: M2.6 protein C;Species: Capra aegagrus hircus (domestic goat) C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 16-Aug-1996 c;Accession: B92978; A02840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R;Joubert, F.
J. S. Afr. Ch
                                                                                                                                                                                                                                                                                          Query Match

Best Local Similarity

Matches 6; Conserv
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C;Comment: Wool and hair consist of microfibrils (
C;Superfamily: keratin high-sulfur matrix protein
C;Keywords: duplication; hair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R/Swart, L.S., Haylett, T.
Blochem. J. 133, 641-654, 1973
A:Title: Studies on the high-sulphur proteins
A; Reference number: A90269; MUID:74022242
A; Accession: A02840
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
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Best Local :
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                                                                                                                                                                                                                          GGGCLQP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GGGCVQP 7
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                                                                                                                                                                                                                          21
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                             28,
                        250-263, 1975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81.6%;
85.7%;
                                                                                                                                                                                                                                                                               Score 40; DB Pred. No. 6.3; 1; Mismatches
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Pred. No.
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6.3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                reduced mohair. The
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#text_change 16-Aug-1996
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Qy
                                              Query Match
Best Local s
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A:Molecule type: protein
A:Residues: 1-36 <BED>
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
                                                                                           A; Status:
                                                                                                          R;Bedzyk, W.D.; Johnson, L.S.; Riordan, G.S.; Voss Jr., E.W.
J. Biol. Chem. 264, 1565-1569, 1989
A;Title: Comparison of variable region primary structures within A;Reference number: A31485; MUID:89109167
                                                                                                                                                                                   Ig heavy chain V regions (3-24 and 5-14) - mouse (fragment) C;Species: Mus musculus (house mouse) C;Date: 31-Jul-1989 #sequence_revision 31-Jul-1989 #text_change C;Accession: D31485
                                                                                                                                                                           R;Bedzyk, W.D.;
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                                                                                                                                                                                                                                                                                                                                                                      QΥ
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Science 277, 1453-1462, 1997
A;Title: The complete genome sequence of Escherichia coli K-12.
A;Reference number: A64720; MUID:97426617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Cross-references:
A;Experimental sources
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Status: preliminary; nucleic acid sequence not shown; A;MoLecule type: DNA A;Residues: 1-278 <BLAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ethanolamine utilization protein EutJ - Escherichia coli (strain K-12)
C:Species: Escherichia coli
C:Datc: 12-Sep-1997 #sequence_revision 17-Sep-1997 #text_change 08-Oct-1999
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C:Comment: Wool and hair consist of microfibrils (
C:Superfamily: keratin high-sulfur matrix protein
C:Keywords: duplication; hair
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A:Title: Studies on the high-sulphur proteins of reduced mohair. The isolation A:Reference number: A92978
A:Accession: A92978
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Best Local
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15 GGGCLQP 21
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les 6; Conserv
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source: strain K-12, substrain MG1655
                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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75.0%;
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85.7%;
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Pred. No. 12;
1; Mismatches
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Pred. No.
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Pred. No. 6.4;
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n IIIA
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                                                                                                                                                                                          30-May-1997
                                                                                                                     an anti-fluorescein
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1 GGGCVQPG 8

Similarity

79.6%; 87.5%;

Score 39; DB; Pred. No. 3.1; 0; Mismatches

2;

Length 36;

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Indels

0;

Gaps

0;

Conservative

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RESULT
S36381
Ig heav
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R;Currier, S.J.; Gallarda, J.L.; Knight, K.L.
J.Immunol. 140, 1651-1659, 1988
A;Title: Partial molecular genetic map of the rabbit V-H A;Reference number: A27606; MUID:88154464
A;Accession: A27606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Molecule type: mRNA
A;Residues: 1-30 <ANS>
A;Cross-references: EMBL:X73019
A;Cross-references: EMBL:X73019
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;1-38/Domain: immunoglobulin homology (fragment) <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Mus musculus (house mouse)
C;Date: 19-Mar-1997 #sequence_revision 24-Jul-1997 #text_change 17-Jul-1998
C;Accession: S33402; S36385
R;Kettleborough, CA.; Saldanha, J.; Ansell, K.H.; Bendig, M.M.
Eur. J. Immunol. 23, 206-211, 1993
A;Title: Optimization of primers for cloning libraries of mouse immunoglobula, Reference number: S33391; MUID: 93122092
                                                                                                                                                                                                                                                             A;Introns: 30/3
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
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A; Residues: 1-59 < CUR>
A; Cross-references: GB: M19706
A; Note: the authors translated
C; Genetics:
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A; Reference number: $36376
A; Accession: $36385
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A; Residues: 1-38 <KET>
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Best Local S
Matches 7
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Best Local
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heavy chain V region - mouse (fragment)
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                                                                                                                       1 GGGCVQPG 8
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7; Conser
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7; Conser
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87.5%;
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                                                                                                                                                                                          Score 39; DB
Pred. No. 4.7;
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Pred. No. 3.3;
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 Ig heavy chain precursor V-III
C; Species: Homo sapiens (man)
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A;Experimental source: strain BALB/c
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
C;Keywords: heterotetramer; immunoglobulin cIMM>
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C;Date: 19-Mar-1997 #sequence_revision 29-Aug-1997 #text_change 23-Jul-1999
C;Accession: S36382; S33397
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A;Experimental source: strain BALB/c
A;Experimental source: strain BALB/c
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;14-59/Domain: immunoglobulin homology (fragment) <IMM>
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R;Kettleborough, C.A.; Saldanha, J.; Ansell, K.H.; Bendig, M.M.
Eur. J. Immunol. 23, 206-211, 1993
A;Title: Optimization of primers for cloning libraries of mouse immunoglobulin genes A;Reference number: S33391; MUID:93122092
A;Accession: S33396
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A; Residues: 1-33 <KET>
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C;Date: 19-Mar-1997 #sequence_revision 29-Aug-1997 #text_change 23-Jul-1999
C;Accession: S36381; S33396
RESULT
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A; Residues: 1-60 <ANS>
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A; Residues: 1-59 < ANS>
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A; Residues: 3-43 <KET>
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Best Local Similarity
Matches 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 GGGLVQPG
12
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                                                                                                                  GGGCVQPG
                                                                                                                                                                  Similarity 7; Conser
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87.5%;
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87.5%;
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                                                                                                                                                               Score 39; DB Pred. No. 4.8; 0; Mismatches
                                                                                                                                                                    0
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                                                                                                                                                                                      4.8;
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region (Ab21) -

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A.Molecule type: DNA
A.Residues: 1-94 <LAW>
C.Superfamily: immunoglobulin V region; immunoglobulin
C.Keywords: heterotetramer; immunoglobulin
F;11-94/Domain: immunoglobulin homology <IMM>
                                                                                                                                                      R:Lawler, A.M.; Lin, P.S.; Gearhart, P.J.
Proc. Natl. Acad. Sci. U.S.A. 84, 2454-2458, 1987
A:Title: Adult B-cell repertoire Is biased toward
A:Reference number: A94148; MUID:87175692
                                                                                                                                                                                                                                                       Ig heavy chain V region (BFL1) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 16-Aug-1988 #sequence_revision 16-Aug-1988 #text_change 16-Aug-1996
C:Accession: D25913
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Experimental source: B cells from patient TD with acute lymphoblastic leukemia, ALL A;Note: the sequence shows the V region (TD-Vo) from a nonproductive DNA rearrangement C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Reywords: acute lymphoblastic leukemia; heterotetramer; immunoglobulin F;31-35/Region: complementarity-determining 1 F;49-65/Region: complementarity-determining 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Watches 7; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Bird, J.; Galili, N.; Link, M.; Stites, D.; Sklar, J.

Exp. Med. 168, 229-245, 1988

A;Title: Continuing rearrangement but absence of somatic hypermutation in immunoglobulin A;Reference number: PL0116; MUID:88286083

A;Accession: PL0120
                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: mRNA
A; Residues: 1-94 <BIR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ig heavy chain V-III region (TD-Vo) - human (fragment)
C:Species: Homo sapiens (man)
C:Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #text_change 16-Aug-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
PL0120
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A.Residues: 1-82 <SAN>
A;Cross-references: GB:M26996
A;Cross-refuence shown differs from the authors' translation after residue
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 09-May-1997 C;Accession: C34964 R;Sanz, I.; Casali, P.; Thomas, J.W.; Notkins, A.L.; Capra, J.D. J. Immunol. 142, 4054-4061, 1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 8/...
7; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GGGCVQPG 8
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          79.6%;
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87.58;
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87.5%;
      Score 39;
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Pred. No. 7
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Pred. No. 6.3;
  DB 2;
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                                                                                                                                                                          two heavy-chain variable-region genes
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Length
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                                                                                       homology
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94;
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Search completed: June 13, Job time: 741 sec

14:23:10

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C:Genetics:
A:Gene: Ig VHX24b
A:Gene: Ig VHX24b
C:Superfamily: immunoglobulin V region; immunoglobulin homology
F:11-94/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                       R;Chies, J.A.; Lembezat, M.P.; Freitas, A.A.
Eur. J. Immunol. 24, 1657-1664, 1994
A;Title: Entry of B lymphocytes into the persistent cell
A;Reference number: 153392; MUID:94298870
A;Accession: 167528
                                                                                                                                                                                     A:Status: preliminary: translated from GB/EMBL/DDBJ A:Molecule type: mRNA A:Mesidues: 1-94 <RES>
                                                                                                                                                                                  A; Cross-references:
                                                                                                                                                                                                                                                                                                  C:Species: Mus sp. (mouse)
C:Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jan-2000
                                                                                                                                                                                                                                                                                                                                             RESULT 15
167528
CD33 antigen homolog - mouse (fragment)
                                 Query Match
Best Local Similarity 8/...
7; Conservative
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Matches 7; Conservative
                          1 GGGCVQPG 8
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||| ||||
4 GGGLVQPG 11
GGGLVQPG 11
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                                                                                                                                                                                                                                                                                                                                                                                                                             11
                                                                  79.6%;
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                                                              Score 39; [
Pred. No. 7;
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0; Mismatches
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Minimum DB
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:
    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
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    length: 0
length: 2000000000
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Match Length
   BLOSUM62
Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   June 13, 2001, 14:21:50 ; Search time 51.57 Seconds (without alignments) 5.314 Million cell updates/sec
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 KR3A_SHEEP
KRA3_CAPHI
EUTJ_ECOLI

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                                                                                                                                                                                                                                                                                                                                                              P02443 ovis aries
P02444 ovis aries
P02442 capra hircu
P77277 escherichia
P41794 salmonella
P01804 mus musculu
P01796 mus musculu
P01797 mus musculu
P01799 mus musculu
P01799 mus musculu
 P011794
P011804
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6 mus musculu
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7 mus musculu
8 mus musculu
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0 mus musculu
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5 mus musculu
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9 homo sapien
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ALIGNMENTS	HV01_RAT HV26_MOUSE	HV16_MOUSE	HV25_MOUSE	HV24_MOUSE	HV23_MOUSE	HV22_MOUSE	HV19_MOUSE	HV18_MOUSE	HV21_MOUSE	HV20_MOUSE
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Best Local Similarity
Watches 6; Conserv
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Matches 6
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                                                                                                                                                                                               VARIANT
VARIANT
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                                                                                                                                                                                                                                                                 PIR; B92978; KRGT3M.
InterPro; IPR002494; -.
                                                                                                                                                                                                                                                                                                         "Studies on the high-sulphur proteins of reduced mohair. The isolation and the amino acid sequence of protein SCMKB-M2.6.";

S. Afr. Chem. Inst. 28:250-263(1975),

-I- FUNCTION: THE KERATIN PRODUCTS OF MAMMALIAN EPIDERWAL DERIVATIVES SUCH AS WOOL AND HAIR CONSIST OF MICROFIBRILS EMBEDDED IN A RIGID MATRIX OF OTHER PROTEINS. THE MATRIX PROTEINS INCLUDE THE HIGH-SULFUR AND HIGH-TYROSINE KERATINS, HAVING MOLECULAR WEIGHTS OF 6-20 KDA, WHEREAS THE MICROFIBRILS CONTAIN THE LARGER, LOW-SULFUR AS 2978; KRGT3J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KRA3_CAPHI STANDARD; PRT; 132 AA. P02442; P024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-SOUTH AFRICAN ANGORA;
        15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Joubert F.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Capra hircus (Goat).

Cubra hircus (Goat).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;

Bovidae; Caprinae; Capra.
                                   1 GGGCVQP 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAPHI
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam;
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SEQUENCE
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15 GGGCLQP 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Swart L.S., Haylett T.;
"Studies on the high-sulphur proteins acid sequence of protein SCMKB-3A3.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Swart L.S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-74022242; PubMed-4584026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PF01500; Keratin_B2;
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119
132
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6; Conserv
                                                                      Conservative
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                                                                                                                                                                        Ą,
                                                                                                                                               23
119
14255 þ
                                                                                       81.6%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              THE SOURCE OF THIS PROTEIN IS MERINO WOOL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14163 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81.6%;
85.7%;
                                                                                                                                                                    ₩,
                                                              Score 40; DB 1
Pred. No. 2.6;
1; Mismatches
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MISSING (IN MINOR COMPONENT)
; 6COCC8BFA13AB28B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 40;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8C0B56C0070B1C50 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (M2.6 PROTEIN).
                                                              0;
                                                                                               Length 132
                                                                                                                                                         COMPONENT).
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                                                        Indels
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Blattner F.R., Plunkett G. III, Bloch C.A., Perna N.T., Burland V.
Riley M., Collado-Vides J., Glasner J.D., Rode C.K., Mayhew G.F.,
Gregor J., Davis N.W., Kirkpatrick H.A., Goeden M.A., Rose D.J.,
Mau B., Shao Y.;
"The complete genome sequence of Escherichia coli K-12.";
Science 277:1453-1474(1997).
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(C STRAIN-ATCC 14028S;
(C MEDIJINE-95173114; PubMed=7868611;
RX MEDIJINE-95173114; PubMed=7868611;
RT "Ethanolamine utilization in Salmonella typhimurium: nucle sequence, protein expression, and mutational analysis of cohe eutE eutJ eutG eutH gene cluster.";

"Ancteriol. 177:1357-1366(1995).
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                                                                                 Bernard O., Gough N.M.;
Bernard O., Gough N.M.;
Bernard O., Gough N.M.;
Between translocated vH and mu constant regions genes.";
Proc. Natl. Acad. Sci. U.S.A. 77:3630-3634(1980).
-1- MISCELLANEOUS: THE SEQUENCE OF THE FIRST 197 RESIDUES CREGION WAS ALSO DETERMINED & DIFFERS IN ONLY 3 POSITION CORRESPONDING PORTION OF THE MOUSE MOPC 104E MU CHAIN.
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21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
1G HEAVY CHAIN V-III REGION HPC76 (FRAGMENT).
Mus musculus (Mouse).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-99395039; PubMed-10464203; Kofoid E.C., Rappleye C.A., Stojiljkovic I., Roth J.R.; Kofoid E.C., Rappleye C.A., Stojiljkovic I., Roth J.R.; "The 17-gene ethanolamine (eut) operon of Salmonella typhimurium encodes five homologues of carboxysome shell proteins."; J. Bacteriol. 181:5317-5329(1999).
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBI_TaxID=10090;
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15-JUL-1999 (Rel. 38, Last annotation up
IG HEAVY CHAIN V-III REGION ABE-47N.
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata;
Mammalia; Eutheria; Rodentia; Sciurognat
(7)
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1- MISCELLA.
1- MISCELLA.
BINDS INULIN.
PIR; C93818; AVMS09.
InterPro; IPRO03006; -
Pfam; PF00047; 19; 1
Immunoglobulin V region.
7*GULFID 22 98
7*A; 12647 MF
                                 Biochemistry 16:1170-1175(1977).
                                                                                   SEQUENCE.
MEDLINE=77134726; PubMed=402936;
Vrana M., Rudikoff S., Potter M.;
"Heavy-chain variable-region sequence
protein.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HV29_MOUSE STANDARD; PRT; 113 AA.

P01798;
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1996 (Rel. 38, Last annotation update)
16-HEAVY CHAIN V-III REGION E109.

Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-78158406; PubMed-417344; Vrana M., Rudikoff S., Potter M.; "Sequence variation among heavy chains from proteins."; Proc. Natl. Acad. Sci. U.S.A. 75:1957-1961(1-1-MISCELLANEOUS: THIS CHAIN WAS ISOLATED F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 79.6%;
87.5%;
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                                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
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WAS ISOLATED FROM A MYELOMA PROTEIN THAT
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Pred. No. 3.4;
0; Mismatches
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3.4;
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                                                                           inulin-binding myeloma
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             RESULT
HV34_MO
ID HV
AC P0
DT 21
DT 115
DT 15
DE IG
OS MU
OC EU
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RP
RX MF
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HV34_MOUSE STANDARD; PRT; 113

P01803; P01806; Rel. 01, Created)

21-JUL-1986 (Rel. 01, Last sequence upda

15-JUL-1999 (Rel. 38, Last annotation upda)

IG HEAVY CHAIN V REGION AMPC1.
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Best Local S
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                                                               Mus musculus (Mouse).
Eukaryota; Metazoa; C
Mammalia; Eutheria; R
NCBI_TaxID=10090;
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DR
DR
SQ
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HV31_MOUSE STANDARD; PRT;
P01800;
21_JUL-1986 (Rel. 01, Created)
01-OCT-1993 (Rel. 27, Last sequence
15-JUL-1999 (Rel. 38, Last annotatic
IG HEAVY CHAIN V-III REGION T957.
Mus musculus (Mouse).
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Best Local s
Matches 7
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InterPro; IPR003006; Pfam; PF00047; 19; 1.
Immunoglobulin V region.
DISULFID 98
NON TER 113 113
SEQUENCE 113 AA; 12732;
SEQUENCE.
MEDLINE=81216632; PubMed=6787122;
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SEQUEN
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Pfam; PF00047; ig; 1
Immunoglobulin V region.
DISULFID 9
NON_TER 113 113
SEQUENCE 113 AA; 12675 MW;
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Rodentia;
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87.5%;
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Pred. No. 3.4;
0; Mismatches
                                                                 Craniata; Ver
Sciurognathi;
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Sciurognathi; Muridae; Murinae; Mus
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Pred.
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RESULT 9
HV99_MM
AC P01798
DT 21-JUL
DT 21-JUL
DT 15-JUL
DT 15-JUL
OC Mammal
OC Mammal
OX NCBL_T
RN [1]
RP SEQUEN
RX MEDLIN
RA Vrana |
RT "Seque
RT "Seque
RT "Seque
RT Froc.
CC -1- MI
CC BI
CC BI
CR Interp
DR Pfam;
KW Immuno
ET NON_TE
SEQUEN

SEQUENCE

В

8 GGGLVQPG 15 1 GGGCVQPG

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Query Match 79.6 Best Local Similarity 87.5 Matches 7; Conservative

RESULT 10

HV30_MOUSE P01799;

STANDARD;

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1 GGGCVQPG ||| ||| 8 GGGLVQPG

8

15

Query Match Best Local S

Matches

Similarity 7; Conser

79.6%; 87.5%;

Conservative

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RESULT 13
HV32_M
HV32_M
AC P01801
DT 21-JUL
DT 15-JUL
DT 15-JUL
DT 21-JUL
DT 21-JUL
DT 21-JUL
DT 21-JUL
DT 21-JUL
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OC Mus mu
OC Eukary
OC Mammal
OX NCBI_T
RN [1]
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RT The C
RT bindin
CC -1- MI
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CR Interp
DR Pfam;
CC PIR; C
DR Interp
DR Pfam;
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DR Interp
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  RESULT
HV33_MC
ID HV
AC PC
DT 21
DT 21
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Best Local S
Matches 7
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InterPro; IPR003006; .
InterPro; IPR003006; .
Immunoglobulin V region.
Immunoglobulin V 2 98
                                     HV33_MOUSE STANDARD; PRT; 1

PO1802;

21-JUL-1986 (Rel. 01, Created)

21-JUL-1986 (Rel. 01, Last sequence up

15-JUL-1999 (Rel. 38, Last annotation

IG HEAVY CHAIN V-III REGION W3082.
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"Immunoglobulin heavy chains from anti-inulin myeloma prot evidence for a new heavy chain joining segment.";
J. Immunol. 127:191-194(1981).
-I- MISCELLANEOUS: THIS CHAIN WAS ISOLATED FROM A MYELOMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          binding proteins.";
J. Immunol, 128:302-307(1982).
-!- MISCELLANEOUS: THIS CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE-82099361; PubMed-6798111;
Johnson N., Slankard J., Paul L.,
"The complete V domain amino acid
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    Eukaryota; Metazoa;
                                                                                                                                                                             MOUSE
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Mammalia; Eutheria;
                      Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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12810 MW;
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Rodentia;
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12691 MW;
Chordata; Craniata; Vertebrata; Euteleostomi;
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Pfam; PF00047; 1g; 1.
Immunoglobulin V region.
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25 98
26 115
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SEQUENCE
                                                                                                                                                         Wang A.-C., wany .... "Represented the property of the Heavy Chain.";
"Immunoglobulin structure and genetics. Identity between variable regions of a mu and a gamma2 chain.";
J. Biol. Chem. 252:7192-7199(1977).
-i- MISCELLANEOUS: THE SEQUENCES OF THE V REGIONS OF THE HEAVY CHAINS OF IGM AND IGG2 ISOLATED FROM A SINGLE PATIENT WITH BICLONAL CAMMODATHY ARE IDENTICAL. THEIR LIGHT CHAINS ARE APPARENTLY ALSO
                                                                                                                                                                                                                                                                                                 21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence up
15-JUL-1999 (Rel. 38, Last annotation
IG HEAVY CHAIN V-III REGION TIL.
Homo sapiens (Human)
                                                                                                              InterPro; IPR003006; -. Pfam; PF00047; ig; 1. Immunoglobulin V region.
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Mammalia; Eutheria;
NCBI_TaxID=9606;
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Johnson N., Slankard J., Paul L.,
"The complete V domain amino acid
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-!- MISCELLANEOUS: THIS CHAIN
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Search completed: Job time: 525 sec

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2: sp_bacteria
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4: sp_human:*
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Gapop 10.0 , Gapext 0.5
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Compugen Ltd.
Q9uhf1 homo sapien
Q9yml5 drosophila
Q9yml5 rattus sp.
Q9yml5 rattus sp.
Q9ulb6 homo sapien
Q9ul90 homo sapien
Q9ul91 homo sapien
Q9ul91 homo sapien
Q9ul71 homo sapien
Q9ul71 homo sapien
Q9ul84 homo sapien
Q9y509 homo sapien
Q9y509 homo sapien
Q4918 mycobacteri
Q9yxu0 drosophila
Q16039 drosophila
Q16039 drosophila
Q160418 mycobacteri
Q23446 caenorhabdi
Q34446 caenorhabdi
Q9xtn4 drosophila
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ALIGNMENTS

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Smith D.R., Doucette-Stamm L.A., DeLoughery C., Lee H.-M., DuBois Aldredge T., Bashirzadeh R., Blakely D., Cook R., Gilbert K., Aldredge T., Bashirzadeh R., Bakely D., Cook R., Gilbert K., Harrison D., Hoang L., Keagle P., Lumm W., Pothier B., Qiu D., Spadafora R., Vicare R., Wang Y., Wierzbowski J., Gibson R., Jiwani N., Caruso A., Bush D., Safer H., Patwell D., Prabhakar S., McDougall S., Shmer G., Goyal A., Pietrovski S., Church G.M., Daniels C.J., Mao J.-I., Rice P., Nolling J., Reeve J.N.; "Complete genome sequence of Methanobacterium thermoautotrophicum deltaH: functional analysis and comparative genomics."; J. Bacteriol. 179:7135-7155(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     O26242;
O1-JAN-1998 (TrEMBLrel. 05, Created)
O1-JAN-1998 (TrEMBLrel. 05, Last sequence update)
O1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
HETERODISULFIDE REDUCTASE HDRD RELATED PROTEIN.
                                                                                                                                                         INTERPRO; IPR000194; -.
PROSITE; PS00152; ATPASE_ALPHA_BETA; UNKNOWN_1.
SEQUENCE 145 AA; 16448 MW; 694CD4CE1A6560A8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-DELTA H;
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Methanobacterium.
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100 GGGCVQP 106
                                                                  Local Similarity tes 7; Conserv
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                                                                     87.8%; Score 43; DB 1; Length 145; ilarity 100.0%; Pred. No. 2.2; Conservative 0; Mismatches 0; Indels
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RX MEDLINE-20196006. PubMed=10731132;
RA Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.E.,
RA Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.E.,
RA George R.A., Lewis S.E., Richards S., Ashburrar M., Henderson S.N.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
RA Maril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,
RA Bellew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
RA Cherry J.M., Cawley S., Dahlke C., Dwonport L.B., Davies P.,
RA Chery J.M., Cawley S., Dahlke C., Dwonport L.B., Davies P.,
RA Chery J.M., Cawley S., Dahlke C., Dwonport L.B., Davies P.,
RA Chery J.M., Cawley S., Dahlke C., Dwonport L.B., Davies P.,
RA Chery J.M., Evangelista C.C., Ferriera S., Fleischmann W.,
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09VMH5;

01-MAY-2000 (TrEMBLrel. 13, C:

01-MAY-2000 (TrEMBLrel. 13, L:

01-CCT-2000 (TrEMBLrel. 15, L:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
NCBL_TaxID=7227;
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Q1-MAY-2000 (TrEMBLrel. 13, C.
Q1-MAY-2000 (TrEMBLrel. 13, L.
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NOTCH4-LIKE PROTEIN.
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EMBL; AF186111; AAF01429
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
NCBI_TaxID-9606;
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87.5%;
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MW; 5740BB845ED5A988 CRC64;
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, Last annotation |
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RESULT Q90V16 AC ID Q10 Q10 AC Q9 DT 01 DT 01 DT 01 DE PR CO Ma OX NC CM MC (1 RP SHE RX ME RX M
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HSSP; P01789; 1MCP.
TTOTIRNCE 15 AA; 1469 W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   O9QV16 PRELIMINARY; PRT; 15 AA.
09QV16;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
PROLACTIN-BINDING PROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-95094032; PubMed-8000909;
                                                                                                                                                                                                                                                                                     "Serum prolactin binding protein (PRL-BP) of human identified as IgG.";
C. R. Acad. Sci., III, Sci. Vie 317:293-298(1994).
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Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10118;
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INTERPRO; IPR000822; -
PFAM; PF00096; zf-C2H2; 6.
PROSITE; PS00028; ZINC_FINGER_C2H2; 6.
SEQUENCE 622 AA; 68241 MW; 01E2B29ED64B9E8B CRC64;
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GGGLVQPG 15
                                                       GGGCVQPG
                                                                                                     Similarity 87.57; Conservative
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Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rat
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87
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75.0%;
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Pred. No.
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0; Mismatches
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Pred. No. 8.6;
2; Mismatches
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1.3;
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C 09UL90;
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DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence upuacce,
DT 01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
DE MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIABLE REGIONO Sapiens (Human).

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OSULB6;
O1-MAY-2000 (TrEMBLrel. 13, Createu,
O1-MAY-2000 (TrEMBLrel. 13, Last seque
O1-OCT-2000 (TrEMBLrel. 15, Last anno'
O1-OCT-2001 (TREMBLREL 15, Last anno'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE-98277139; PubMed-9614934; MEDLINE-98277139; PubMed-9614934;
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EMBL: AF035024; AAD56260.1;
INTERPRO; IFR003006;
PFAM: PF00047; 19; 1.
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Submitted (NOV-1999) to the
EMBL; AB035268; BAA87067.1;
HSSP; P01772; 2FB4.
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HOMO sapiens (Human).
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GGGVVQPG
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113 AA;
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95 AA;
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Pred. No. 7.3;
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Catarrhini; Hominidae;
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Q9UL91;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-JUN-2000 (TrEMBLrel. 14, Last annotation update)
MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIABLE
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SEQUENCE FROM N.A.
MEDLINE-98277139; PubMed-9614934;
MEDLINE-98277139; PubMed-9614934;
MEDLINE-98277139; PubMed-9614934;
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                                                                                                                                                                                                                                                                                                                                               Clin. Immunol. Immunopathol. 87:184-192(1998). EMBL; AF035023; AAD56259.1; -. INTERPRO; IPR003006; -.
                                                                                                                                                                                                                                                                                                                    PFAM; PF00047;
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Mammalia; Eutheria; Primates;
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      fetus."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wu X., Liu B.,
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7 GGGVVQPG
1 GGGCVQPG
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7; Conserv
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7; Conser
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116 AA;
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Pred. No. 8.9;
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PFAM; PF00047;
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SEQUENCE FROM N.A.
MEDLINE-98277139; PubMed-9614934;
MEDLINE-98277139; PubMed-9614934;
T-111 B., Van der Merwe P.L.,
                                                                                                                                                                                                                      SEQUENCE
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Q9UL71;
Q9UL71;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-OCT-2000 (TrEMBLrel. 15, Last annotation update)
MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIABLE
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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EMBL; AF035042; AAD56278.1; .
HSSP; P01772; 2F84.
INTERPRO; IPR003006; -
PFAM; PF00047; 19; 1.
NON_TER 1, 1 1
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SEQUENCE FROM N.A.
MEDLINE-98277139; PubMed-9614934;
MEDLINE-98277139; PubMed-9614934;
Van der Merwe P.L.,
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Q9UL72;
Q1-MAY-2000
Q1-MAY-2000
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-CT-2000 (TrEMBLrel. 15, Last annotation update)
MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIABLE
GGGCVQPG
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                                                        Similarity
7; Conserv
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7; Conservative
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118 AA;
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; 13154 MW;
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87.5%;
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1; 12872 MW;
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                              Score 39; DB Pred. No. 9.1; O; Mismatches
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Catarrhini; Hominidae; Homo.
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Pred. No.
                                                                                                                                                                              2F045CCFA5D50736 CRC64;
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                                                                  DB 4;
9.1;
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8.9;
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09Y509;
01-NOV-1999 (TremBLrel 12, Cr.
01-NOV-1999 (TremBLrel 12, La
T 01-OCT-2000 (TremBLrel 15, La
T 01-OCT-2010 (TRAGMENT).
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                                                                                                                                                                SEQUENCE FROM N.A.

MEDLINE=96071149; PubMed=7475288;
Cao J., Vescio R.A., Rettig M.B., Hong C.H., Kim A., Lee J.C.,
Lichtenstein A.K., Berenson J.R.;
"A CDIO-positive subset of malignant cells is identified in multiple
myeloma using PCR with patient-specific immunoglobulin gene primers.";
Leukemia 9:1948-1953(1995).
EMBL; 80086; AAD14339.1; -.
HSSP; P01772; 2FB4.
                                                                                                     PFAM; PF00047; 19; 1.
NON_TER 1
SEQUENCE 147 AA; 1
                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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NON_TER 1 1 1

NON_TER 122 122

SEQUENCE 122 AA; 13:
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EMBL; AF035030; AAD56266.1;
HSSP; P01772; 2FB4
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SEQUENCE FROM N.A.
MEDLINE-98277139; PubMed-9614934;
Tin B., Van der Merwe P.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIABLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
NCBI_TaxID-9606;
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GGGVVQPG 15
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                                                                                                   147 AA;
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15768
              79.6%;
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13579 MW;
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87.5%;
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       Score 39;
Pred. No.
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Last sequence update)
Last annotation update)
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                                                                                8489FCAAA7BC925C CRC64;
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Catarrhini; Hominidae;
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DB
11;
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9.2;
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; Homo.
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Length 147;

В S

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Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
An Amanatides P.G., Scherer S.E., Li P.M., Hoskins R.A., Galle R.F.,
RA Amanatides P.G., Scherer S.E., a P.M., Hoskins R.A., Galle R.F.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Hrandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Han K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
RA Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Below R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Below R.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,
RA Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Ge Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 6
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plasmid pAL5000.";
plasmid 27:130-140(1992).
EMBL; M60875; AAA25373.1; -
INTERPRO; IPR000345; -
PROSITE; PS00190; CYTOCHROME_C; UI
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Q49182;
Q1-NOV-1996
Q1-NOV-1996
Q1-JUN-2000
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01-MAY-2000
01-OCT-2000
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DIA SEQUENCE, ORFS 1 AND Z.

Mycobacterium fortuitum.

Mycobacterium fortuitum.

Bacteria; Firmicutes; Actinobacteria; Actinobacteridae

Bacteria; Firmicutes; Actinobacteriae; Mycobacteriaceae;
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                                                                                                                                                                                                                                                                                                                                                                                                    Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
MEDLINE-92311251; PubMed-1
Labidi A., Mardis E., Roe
"Cloning and DNA sequence
                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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NCBI_TaxID=1766;
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0 (TrEMBLrel.
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(TremBLrel. 01, Last seq
(TremBLrel. 14, Last ann
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E., Roe B.A., Wallace R.J. Jr
sequence of the Mycobacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     85
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13,
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Last sequence update)
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Pred. No. 42;
1; Mismatches
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715EEBE768D9A856 CRC64;
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. 42;
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clum fortuitum '
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RA Fosler C., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.A.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibeywam C.,
RA Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
RA Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McEherson D.,
RA McIson D., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
RA McIson C., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
RA McIson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G.,
RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
RA Spier E., Spradling A.C., Stapleton M., Skupski M.P., Smith T.,
RA Syler E., Spradling A.C., Stapleton M., Strong R., Sun E.,
Svirskas R., Tector C., Turner R., Venter E., Wang A.H., Wang X.,
RA Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weissenbach J.,
RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Wang Z.-Y., Dang F. N., Zhong W., Zhong W., Zhong G., Zhao Q., Zheng L.,
RA Zheng X.H., Zhong F. N., Zhong W., Zhan M., Zhang G., Zhao Q., Zheng L.,
RA Zheng X.H., Zhong F. N., Zhong W., Zhong W., Zhu S., Zhu X., Smith H.O.,
RA Zheng X.H., Zhong F. M., Rubin G.M., Venter J.C.;
RT Tepecce 287:2185-2195(2000).
DR H.SSP; P26769; 1AB8.
DR H.SSP; P26769; 1AB8.
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Best Local
                                              Query Match
Best Local
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                          Matches
                                                                                                                                                                                      MEDLINE-97431620; PubMed-9287125;
IOUTGENKO V., Kliot B., Cann M.J., Le
"Cloning and characterization of a Du
homologous to mammalian type IX.";
FEBS Lett. 413:104-108(1997).
EMBL; AF005630; AAB70469.1; -
HSSP; P26769; IAB8.
FILYBASE; FBGN0022710; Ac35C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       O16039 PRELIMINARY; PRT; 1708 AA. O16039; O1-JAN-1998 (TrEMBLrel. 05, Created) O1-JAN-1998 (TrEMBLrel. 05, Last sequence update) O1-OCT-2000 (TrEMBLrel. 15, Last annotation update) ADENILYI CYCLASE ISOFORM DAC9.
                                                                                                                                                                                                                                                                                                                                                                                                                          Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                   INTERPRO; IPR001054; PFAM; PF00211; guany
                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PFAM; PF00211; guanylate_cyc; SEQUENCE 1690 AA; 186868 M
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                                              Similarity
                        6;
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                          Conservative
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                                                                                                                               guanylate_cyc; 2
8 AA; 189139 MW;
                                              79.6%;
75.0%;
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75.0%;
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                                              Score 39; DB 5;
Pred. No. 1.1e+02;
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Pred. No. 1.1e+02;
0; Mismatches 2
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                                                                                                                                 AC1A45CF856D5BFB CRC64;
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Drosophila adenylyl cyclase
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CRC64;

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RESULT Q9VXU0

Q9VXU0

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Indels

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Search completed: June 13, 2001, 14:29:40 Job time: 541 sec Ωу 1 GGGCVQPG 8

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Result
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Issued_Patents_AA:*

1: /cgn2_6/ptodata/2/1.

2: /cgn2_6/ptodata/2/1.

3: /cgn2_6/ptodata/2/1.

4: /cgn2_6/ptodata/2/1.

5: /cgn2_6/ptodata/2/1.

6: /cgn2_6/ptodata/2/1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  length: 0
length: 2000000000
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 BLOSUM62
Gapop 10.0 , Gapext 0.
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1.953 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGCVQPG 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /cgn2_6/ptodata/2/1aa/5A_COMB.pep:*
/cgn2_6/ptodata/2/1aa/5B_COMB.pep:*
/cgn2_6/ptodata/2/1aa/6A_COMB.pep:*
/cgn2_6/ptodata/2/1aa/6B_COMB.pep:*
/cgn2_6/ptodata/2/1aa/FCTUS_COMB.pep:*
/cgn2_6/ptodata/2/1aa/PcTUS_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                Length
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                                          US-08-331-398A-55
US-08-331-397B-54
US-08-331-397B-54
US-08-759-804A-54
US-08-859-931A-2
US-08-467-282B-80
US-08-467-282B-80
US-08-466-710C-80
US-08-466-710C-80
US-08-471-780C-119
US-08-471-780C-119
US-08-471-282A-119
US-08-471-282A-119
US-08-468-739C-119
US-08-468-739C-119
US-08-468-739C-119
US-08-468-739C-119
US-08-468-739C-119
US-08-468-739C-119
US-08-950C-75
US-08-318-157B-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                      Sequence 66, Appl
Sequence 42, Appl
Sequence 65, Appl
Sequence 55, Appl
Sequence 54, Appl
Sequence 54, Appl
Sequence 2, Appl
Sequence 113, Appl
Sequence 80, Appl
Sequence 80, Appl
Sequence 80, Appl
Sequence 80, Appl
Sequence 119, Appl
Sequence 77, Appl
Sequence 77, Appl
Sequence 75, Appl
Sequence 77, Appl
Sequence 77, Appl
Sequence 77, Appl
Sequence 78, Appl
Sequence 77, Appl
Sequence 78, Appl
Sequence 77, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                               Description
Sequence
Sequence
; MOLECULE TYPE: US-08-331-398A-66
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US-08-331-398A-66
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GENERAL I
                            TOPOLOGY: 1i
                                                                         LENGTH:
                                                         amino acid
                              linear
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ALIGNMENTS	US-08-470-139-17 US-08-477-102C-36 US-08-053-451B-126 US-08-053-451B-126 US-08-217-202-118 US-08-211-202-118 US-08-211-202-118 US-08-211-202-118 US-07-942-245-37 US-08-428-197-4 PCT-US93-10555-4 PCT-US93-10555-4 US-07-942-245-17 US-07-942-245-17 US-07-942-245-21 US-08-428-197-3 PCT-US93-10555-3 US-08-428-197-3 US-08-428-197-3 US-08-211-202-117
	Sequence 17, Appl Sequence 126, Appl Sequence 127, Appl Sequence 105, Appl Sequence 116, Appl Sequence 118, Appl Sequence 118, Appl Sequence 31, Appl Sequence 48, Appl Sequence 44, Appl Sequence 4, Appl Sequence 4, Appl Sequence 4, Appl Sequence 17, Appl Sequence 3, Appl Sequence 3, Appl Sequence 3, Appl Sequence 3, Appl Sequence 21, Appl Sequence 3, Appl Sequence 3, Appl Sequence 3, Appl Sequence 17, Appl Sequence 117, Appl

APPLICATION NUMBER: US/08/331,398A FILING DATE: 28-OCT-1994 CLASSIFICATION: 435 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 07/767,331 FILING DATE: 30-SEP-1991 PRIOR APPLICATION DATA: APPLICATION DATA: APPLICATION DATA: US 07/596,289 FILING DATE: 12-OCT-1990 ATTORNEY/AGENT INFORMATION: TELEFAX: (415) 543-504 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS CORRESPONDENCE ADDRESS: ADDRESSEE: Townsend and Townsend and Crew STREET: One Market Plaza, Steuart Street Plaza APPLICANT: Pastan, Ira APPLICANT: Willingham, Mark APPLICANT: FitzGerald, David APPLICANT: Brinkmann, Ulrich APPLICANT: Pai, Lee APPLICANT: Pai, Lee TELEPHONE: (415) 543-9600 TELEPHONE: (415) 543-5600 TELEFAX: (415) 543-5043 SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: TITLE OF INVENTION: Single Chain B3 Antibody Fusion Proteins TITLE OF INVENTION: and Their Uses (as amended) NUMBER OF SEQUENCES: 68 NAME: Hunter, Tom REGISTRATION NUMBER: 38,498 REFERENCE/DOCKET NUMBER: 01 STREET: One Market I CITY: San Francisco STATE: California INFORMATION: RY: USA 94105-1492 Application US/08331398A 15 amino acids 015280-126110US

Thereof

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US-08-331-397B-66
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Best Local Similarity
""" Conserve
                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-652-558-42
                                                                                            Sequence 66, Application US/08331397B Patent No. 5981726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
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                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 617-345-9111 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 79.6%; Score 39; DB 1; Best Local Similarity 87.5%; Pred. No. 3.9; Matches 7; Conservative 0; Mismatches
                 TITLE OF INVENTION:
                                          APPLICANT: Pastan, Ira
APPLICANT: Benhar, Itai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: LIN, A
                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 30,237
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-345-9100
TELEPAX: 617-345-0111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/652/558
FILING DATE: JUNE 6, 1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/IB94/0038
FILING DATE: NOVEMBER 21, 1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: WordPerfect 6.1
CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5 inc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: HUMANIZED ANTIBUTITLE OF INVENTION: HUMANIZED ANTIBUTITLE OF INVENTION: THEREOF
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TELEPHONE: 61/-J.-
TELEPHONE: 617-345-9111
TO NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: YANKWICH, LEON REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET:
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                                                                             INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                     15 amino acids
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                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: BANNER & WITCOFF
75 STATE STREET, 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IBM PC compatible
                                                                                                                                                                                                                                                    79.6%;
Chimeric and Mutationally Stabilized Tumor-
Specific Antibody Fragments, Fusion Proteins, and Uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inch diskette, 1.4 Mb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PC-DOS/MS-DOS
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                                                                                                                                                                                                                                       0;
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                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                          DB 2; Length 15;
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                                                                                                                                                                                                                              0;
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                                                                                                                                                                                                                            Gaps
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US-08-759-804A-65
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Best Local Similarity
""" (Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TOPOLOGY: linear; MOLECULE TYPE: peptide US-08-331-397B-66
                                                                                                                                                                       APPLICANT: Pastan, Ira
APPLICANT: Willingham, Mark
APPLICANT: Willingham, Mark
APPLICANT: Brinkmann, Ulrich
APPLICANT: Brinkmann, Ulrich
APPLICANT: Pai, Lee
TITLE OF INVENTION: Tunor-Specifi
TITLE OF INVENTION: Fusion Protei
NUMBER OF SEQUENCES: 68
                                                                                                                                                                                                                                                                                                                                          Sequence 65,
Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/767,331
FILING DATE: 30-SEP-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/596,289
FILING DATE: 12-OCT-1990
ATTORNEY/AGENT INFORMATION:
NAME: HUNTEY, TOM
REFERENCE/DOCKET NUMBER: 38,498
REFERENCE/DOCKET NUMBER: 015280-126:
TELEPHONE: (415) 543-9600
mmrrray: (415) 543-9600
                                                                                                                                                                                                                                                                                                                               GENERAL
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (415) 543-5043
INFORMATION FOR SEQ ID NO: (
                                                                                       CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: The NUMBER OF SEQUENCES: 66 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                           8 GGGLVQPG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGGCVQPG 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
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CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
FILING DATE: 28-OCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                                                                           INFORMATION:
                                                                                                                                                                                                                                                                                                                                              5, Application US/08759804A
5990296
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                                                                               USA
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One Market Plaza, Steuart Street Plaza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   UMBER: US/08/331,397B
28-OCT-1994
                                                                                                                                                                                        Tumor-Specific Antibody Fragments Fusion Proteins, and Uses Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               79.6%;
87.5%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        015280-126120US
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 15;
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SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:

APPLICATION NUMBER:

US/08/759,804A

OPERATING SYSTEM: SOFTWARE: PatentI

PC-DOS/MS-DOS

Release #1.0, Version #1.30

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US-08-331-398A-55
; Sequence 55, Application US/08331398A
; Patent No. 5608039
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TOPOLOGY: linear; MOLECULE TYPE: peptide US-08-759-804A-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPAX: (415)
INFORMATION FOR SEQ ID NO: 65
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/767,331
FILING DATE: 30-SEP-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/596,289
FILING DATE: 12-OCT-1990
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen L.
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 015280-126:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
FILING DALL.

CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/767,331
APPLICATION NUMBER: 30-SEP-1991
                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Pastan, Ira
APPLICANT: Willingham, Mark
APPLICANT: FitzGerald, David
APPLICANT: Brinkmann, Ulrich
APPLICANT: Pai, Lee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 536 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Single Chain B3 Antibody Fusion Proteins TITLE OF INVENTION: and Their Uses (as amended)
                                                                                                                                                                                                                                                                                     ADDRESSEE: Townsend and Townsend and Crew STREET: One Market Plaza, Steuart Street Plaza CITY: San Francisco
STATE: California
                                                                                                 APPLICATION NUMBER: US/08/331,398A FILING DATE: 28-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 0 FILING DATE: 28-OCT-1994
                                                                                                                                                                                                                                                        ZIP: 94105-1492
                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity es 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE:
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RESULT 6
US-08-401-908-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No. 5684146 GENERAL INFORMATION:
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                                                                                                  INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: pept:
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE: heavy chain of C179
                                                                                                                                                                    REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: TELEPHONE: 202-371-8850
                                                                                                                                                                                                                                                                                     CLASSIFICATION: 536 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Wordperfect 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
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TELEPHONE: (415) 543-9600
                                                                                                                                                                                                                                                    FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 12-OCT-1990 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/596,289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  79.6%;
Local Similarity 87.5%;
nes 7; Conservativo
                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/4 FILING DATE: March 10, 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Washington STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 38 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: U.S.A.
                                                                                                                                                                                                                       REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
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5. 5684146
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                                                                                                                                                                                                                                   Warren M. Cheek,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Wenderoth, Lind & Ponack 805 Fifteenth Street, N.W., #700
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IBM Compatible
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: 36
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ER: 015280-126110US
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 Mismatches

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Pred. No. 4.7;
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US-08-401-908-14

Conservative

79.6%; 87.5%;

Score 39; DB 1; Pred. No. 4.7; Mismatches

Length 18; Indels

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RESULT 8
US-08-759-804A-54
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Best Local (
                                                                                                                  Matches
                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
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Best Local Similarity
Watches 7; Conserva
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                                                                                                                                                                                              TOPOLOGY: 11
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TELEPHONE: (415) 543-9600
TELEFAX: (415) 543-5043
                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/767,331
FILING DATE: 30-SEP-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/596,289
FILLING DATE: 12-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Pastan, Ira
APPLICANT: Benhar, Ital
TITLE OF INVENTION: Chime
TITLE OF INVENTION: Speci
TITLE OF INVENTION: There
NUMBER OF SEQUENCES: 68
CORRESPONDENCE ADDRESS:
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NAME: Hunter, Tom
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atent No. 5981726
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
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CURRENT APPLICATION DATA,
APPLICATION NUMBER: US/08/331,397B
FILING DATE: 28-OCT-1994
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 94105-1492
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                  1 GGGCVQPG 8
                                                                                                                                                                                                                        STRANDEDNESS
                                                           8
                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 38,498
REFERENCE/DOCKET NUMBER: 015280-126120US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC COMPATIBLE OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                      GGGLVQPG 15
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                                                                                                          Similarity 87.97; Conservative
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                                                                                                                                                                                                                                       amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E: Townsend and Townsend and Crew
One Market Plaza, Steuart Street Plaza
                                                                                                                                                                                              peptide
                                                                                                                     79.68;
87.58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chimeric and Mutationally Stabilized Tumor-
Specific Antibody Fragments, Fusion Proteins, and Uses
Thereof
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                                                                                                         0;
                                                                                                                  Score 39;
Pred. No.
                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Version #1.30
                                                                                                                  DB 2; Length 18;
                                                                                                1; Indels
                                                                                              0;
                                                                                           Gaps
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Sequence 2, Application US/08859931A
Patent No. 5945510
GENERAL INFORMATION:
APPLICANT: FASANO, Alessio
TITLE OF INVENTION: SUBSTANTIALLY |
TITLE OF INVENTION: PHYSIOLOGICAL |
TITLE OF INVENTION: MANMALIAN TIGH:
                                                                                                                                             RESULT 9
US-08-859-931A-2
                                                                                                                                                                                                                                             Query Match
Best Local Similarity 8/...,
Matches 7; Conservative
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PRIOR APPLICATION DATA:
APPLICATION UNMER: US 08/331,398
FILING DATE: 28-0CT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/767,331
PRIOR APPLICATION NUMBER: US 07/767,331
PRIOR APPLICATION NUMBER: US 07/596,289
PRIOR APPLICATION NUMBER: US 07/596,289
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 015280-12614
REGISTRATION IMFORMATION:
TELEPHONE: (415) 576-0300
INFORMATION FOR SED ID NO: 54:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: 1:
MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                              1 GGGCVQPG 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: Tumor-Specific Antibody Fragments TITLE OF INVENTION: Fusion Proteins, and Uses Thereof NUMBER OF SEQUENCES: 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 03-DE
                                                                                                                                                                                                         GGGLVQPG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
ZIP: 94111-3834
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                                                                                                                                                                                                                                                                                                                                                                                                               amino acid
                                  PASANO, ALESSIO
VENTION: SUBSTANTIALLY PURE ZONULIN,
VENTION: PHYSIOLOGICAL MODULATOR OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      San Francisco
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Two Embarcadero Center, Eighth Floor
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FitzGerald, David
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                        MAMMALIAN TIGHT JUNCTIONS
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87.5%;
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Pred. No. 4
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Best Local Similarity
Thes 7; Conserve
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 113, Application US/08053451B Patent No. 5955584
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TELEFAX: (202) 293-7860
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
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CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08,
FILING DATE: 21 MAY 1997
CLASSIFICATION: 514
                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/053,451B
FILING DATE: 26-APR-1993
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 30,764
REFERENCE/DOCKET NUMBER: A-
TELECOMMUNICATION INFORMATION:
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MEDIUM TYPE: Floppy disk
                                                                           ATTORNEY/AGENT INFORMATION: NAME: Halluin, Albert P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Chen, Francis W. APPLICANT: Ditlow, Charles C APPLICANT: Calenoff, Emanuel APPLICANT: Calenoff, Emanuel Control of the Control of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HYPOTHETICAL: NO
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
NAME: Halluin, Albert P.
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 76
                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: New York
STATE: New York
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: US
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
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1155 Avenue of the Americas
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATHEROSCLEROTIC PLAQUE SPECIFIC ANTIGENS, ANTIBODIES THERETO, AND USES THEREOF
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Pred. No. 5
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                                                                       TELEFAX: 202-408-4400 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                    OPERATION SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/471,780C
FILING DATE: 06-JUN-1995
CLASSIFICATION: 530
                                                                                                                                        FILING DATE: 21-MAY-1993
ATTORNEY/AGENT INFORMATION:
NAME: POLLET, Jane E.R.
REGISTRATION NUMBER: 33,:
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & Dunner STREET: 1300 I Street, N.W.
                                                 SEQUENCE CHARACTERISTICS
                                                                                                                    TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                PRIOR APPLICATION DATA: APPLICATION NUMBER:
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MEDIUM TYPE: Floppy disk
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APPLICANT: Hamers, Raymond
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                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 08/100,5...
FILING DATE: 17-AUG-1993
FILING DATE: FR 92402326.0
                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FR 9: FILING DATE: 21-AUG-1992
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OTHER INFORMATION: /note= "Where Xaa = k or g = OTHER INFORMATION: Gln"
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TYPE: amino acid
STRANDEDNESS: unknown
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TELEX: 66141 PENNIE
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LENGTH: 26 amino acids TYPE: amino acid STRANDEDNESS: single
                                                                                                      TELEPHONE:
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                                                                                       202-408-4400
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                                                                                                       202-408-4000
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87.58;
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                                                                                                                                                                                                                                 FR 93401310.3
                                                                                                                                                     33,332
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Pred. No. 5.
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RESULT 12 US-08-467-282B-80

APPLICANT:

COUNTRY:

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US-08-471-780C-80

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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/467,282B
FILING DATE: 06-JUN-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
OFFICE APPLICATION DATA:
OFFICE APPLICATION DATA:
OFFICE APPLICATION OFFICE OFFICE APPLICATION OFFICE OFFIC
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Best Local Similarity 8/....
Best Local Similarity 8/...
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 08/106,944
FILING DATE: 17-AUG-1993
APPLICATION NUMBER: FR 92402326.0
FILING DATE: 21-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 93401310.3
FILING DATE: 11-MAX-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 80, Application US/08467282B Patent No. 5800988
                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 26 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 33,332
REFERENCE/DOCKET NUMBER: 040
TELECOMMUNICATION INFORMATION: 202-408-4000
                                                                                                                        Local Similarity les 7; Conserv
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & Dunner
STREET: 1300 I Street, N.W.
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ORIGINAL SOURCE:
ORGANISM: Camelus dr
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                                                                                                                 Conservative
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                                                                                                                                                                                                                                               Camelus dromedarius
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87.5%;
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87.5%;
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                                                                                                       Mismatches
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Pred. No. 6.
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6.5;
                                                                                                                                               Length 26;
                                                                                                Indels
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                                                                                                                                                              US-08-466-710C-80
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Best Local Similarity 87.5%
Matches 7; Conservative
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                                                                                   Sequence 80, Application US/08466710C Patent No. 5874541 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PATENTIA PLOUS/MS-DOS
CURRENT APPLICATION DATA: Release #1.0, Ve
APPLICATION NUMBER: US/08/471,282A
FILING DATE: 06-JUN-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION UMBER: US 08/106,944
FILING DATE: 17-AUG-1993
APPLICATION NUMBER: FR 92402326.0
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 93401310.3
FILING DATE: 21-AUG-1992
APPLICATION DATA: APPLICATION DATA: RPSICATION DATA: TOWNEY AGENT INFORMATION:
RAME: POTTEY JAME E.R.
REGISTRATION NUMBER: 33,332
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 33,332
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-471-282A-80
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              APPLICANT: Casterman, Cecile APPLICANT: Hamers, Raymond TITLE OF INVENTION: Immunoglu
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NUMBER OF SEQUENCES:
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ORIGINAL SOURCE:
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MEDIUM TYPE: Floppy
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Casterman, Cecile APPLICANT: Hamers, Raymond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 1300 I S
                                                                                                                                                                                                                                                      GGGLVQPG 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & Dunner
STREET: 1300 I Street, N.W.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : 26 amino acids amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
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   IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein
  Immunoglobulins Devoid of Light Chains
                                                                                                                                                                                                                                                                                                                                                              79.6%;
87.5%;
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Pred. No. 6.5;
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1 GGGCVQPG 8

Matches Query Match ORGANISM: US-08-467-282B-80

MOLECULE TYPE: ORIGINAL SOURCE:

TOPOLOGY: STRANDEDNESS:

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CORRESPONDENCE ADDRESS:

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US-08-468-739C-80
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 21-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 93401310.3
FILING DATE: 21-MAY-1993
FILING DATE: 21-MAY-1993
ATTORNEY/AGENT INFORMATION:
NAME: POTTET: Jane E.R.
REGISTRATION NUMBER: 04958.0008-
REFERENCE/DOCKET NUMBER: 04958.0008-
REFERENCE/DOCKET NUMBER: 04958.0008-
TELEPHONE: 202-408-4000
TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO: 80:
SEQUENCE CHARACTERISTICS:
LENGTH: 26 amino acids
TYPE: mmino acids
TYPE: mmino acids
STRANDENNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 79.0
Best Local Similarity 87.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                          Sequence 80, Application US/08468739C Patent No. 6015695 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                COUNTRY: USA
ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE:
ORIGINAL SOURCE:
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,710C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/0
FILING DATE: 17-AUG-1993
APPLICATION NUMBER: FR 9
                                                                                                                                                                                               NUMBER OF SEQUENCES: 1:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                        APPLICANT: Casterman, Cecile APPLICANT: Hamers, Raymond TITLE OF INVENTION: Immunogl
                                                                                                                          CITY: Washington STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
CLASSIFICATION:
                                                                                                                                                             ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & Dunner STREET: 1300 I Street, N.W.
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GGGCVQPG 8
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linear
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                                                                                                                                                                                                                     Immunoglobulins Devoid of Light Chains 130
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Pred. No. 6
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ORIGINAL SOURCE:
ORGANISM: Camelus drous-08-468-739C-80
Search completed: June 13, Job time: 627 sec
                                                                               밁
                                                                                                                                        Query Match
Best Local Similarity
Matches 7; Conserv
                                                                                                                                                                                                                                                                                                                                                    NAME: Potter, Jane E.R.
REGISTRATION NUMBER: 33,332
REFERENCE/DOCKET NUMBER: 04958.0008-00000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
TELEFAX: 202-408-4400
TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO: 80:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0/
APPLICATION NUMBER: 17-AUG-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 21-MAY-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 21-AUG-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 06-JUN
                                                                                                                                                                                                                                                                                                                    LENGTH: 26 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                            TOPOLOGY:
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                                                                                              1 GGGCVQPG 8
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                                                                           GGGLVQPG 15
                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                         linear
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21-MAY-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JMBER: US/08/468,739C
06-JUN-1995
                                                                                                                                                                                                                                                                                                        single
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               2001,
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             14:27:06
                                                                                                                                           0,
                                                                                                                                                          Score 39; DB 3; Pred. No. 6.5;
                                                                                                                                           Mismatches
                                                                                                                                                                           Length 26
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0; Gaps

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Title:
Perfect score:
Sequence:
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Maximum DB
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
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length: 2000000000
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         110:
111:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             June 13, 2001, 14:25:44 ; Search time 150.28 Seconds (without alignments) 3.043 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A_Geneseq_0401:*
1: /SIDS6/gcgdata/geneseq/geneseqp/AA1980.DAT:*
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Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             390729 seqs, 57163235 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd
/SIDS6/gcgdata/geneseq/geneseqp/AA1989.DAT:*
/SIDS6/gcgdata/geneseq/geneseqp/AA1990.DAT:*
/SIDS6/gcgdata/geneseq/geneseqp/AA1991.DAT:*
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/SIDS6/gcgdata/geneseq/geneseqp/AA1985.DAT:*
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Pred. No. is the score greater the and is derived b is the number of results predicted by chance to have a ster than or equal to the score of the result being printed, ived by analysis of the total score distribution.

SUMMARIES

Arabidopsis thalia	G31664	21		75.0	36	11
Carbamate hydrolas	P93413	10	493	75.0	36	10
Arabidopsis thalia	G31665	21		75.0	36	9
Protein encoded by	Y23621	20		77.1	37	8
Peptide antagonist	Y79128	21		79.2	38	7
Peptide antagonist	Y79122	21		79.2	38	6
Amino acid sequenc	Y36831	20		81.2	39	_U
Peptide antagonist	Y79118	21		81.2	39	4
Peptide antagonist	Y79114	21	8	83.3	40	ω
Peptide antagonist	Y79125	21	8	85.4	41	2
Peptide antagonist	Y79126	21	8	100.0	48	1
Description	ID		Query Match Length DB	Query	Score	Result

New peptide antagonist of zonulin useful as antiinflammatory agent for

WPI; 2000-205565/18

Fasano

ALIGNMENTS

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RESULT
Y79126
Zonulin; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antiblecer; antival; antibacterial; cytostatic; anti-HIV; vulnerary; antiallergic; hypotensive; immunosuppressive; antiparasitic; vasotropic; gastrointestinal inflammation; therapy.
                                                                                                                                                                                                                                                                                05-JUN-2000
                                                                               03-AUG-1998;
                                                                                                                                            WO200007609-A1.
                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                   Y79126;
                                                                                                    28-JUL-1999;
                                                                                                                       17-FEB-2000
                                                                                                                                                                                                                                                         Peptide antagonist of zonulin.
                                                                                                                                                                                                                                                                                                                        Y79126 standard; Peptide; 8 AA.
                                                          (UYMA-) UNIV MARYLAND BALTIMORE
                                                                                                                                                                                                                                                                               (first entry)
                                                                               98US-0127815.
                                                                                                    99WO-US16683
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RESULT
Y79125
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
   (UYMA-) UNIV MARYLAND BALTIMORE
                                                                   28-JUL-1999;
                                                                                                                        W0200007609-A1.
                                                                                                                                                                               Zonulin; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antiulcer; antiviral; antibacterial; cytostatic; anti-HIV; vulnerary; antiallergic; hypotensive; immunosuppressive; antiparasitic; vasotropic;
                                                                                             17-FEB-2000
                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                              Peptide antagonist of zonulin.
                                                                                                                                                                                                                                                                                                            05-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                              Y79125;
                                                                                                                                                                                                                                                                                                                                                                  Y79125 standard; Peptide; 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       treating cerebral ischemia, stroke, shigellosis, viral gastroenteritis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GGGCVQDG 8
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8; Conserv
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                                  98US-0127815
                                                           99WO-US16683
                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                          inflammation; therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; g
100.0%; g
tive 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 48; DB 21;
Pred. No. 3.2e+05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cerebral edema, gastritis, meningitis, encephalomyelitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
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Dinding. They can be prepared by chemical synthesis or by use of recombinant DNA techniques. The peptide antagonists are used as an infilmmation, where they bind to the 207 receptor in the intestinal and yet does not physiologically modulate the opening of Ty in the intestine. Gastrointestinal inflammation conditions give rise to treating intestinal permeability and the peptide is useful for caused by infection, e.g. Clostridium difficile infection, contestinal conditions that cause protein losing enteropathy enterocolitis, shigellosis, viral gastroenteritis, parasite mucosal erosion or ulcerations, e.g. gastritis, gastric cancer, imphatic obstruction, e.g. congenital intestinal lymphoma, mesenteric tuberculosis, and after surgical correction of congenital heart disease, diseases, diseases marked by correction of congenital heart disease with Fontan's operation, colitis, inflammatory bowel disease, disease, diseases, without ulceration, e.g. Menetrier's disease, colical diseases without ulceration, e.g. Menetrier's disease, colical diseases without ulceration, e.g. Menetrier's disease, colical colisases, essimphilic gastroenteritis, and immune diseases, and a site and immune diseases.
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   physiologically modulate the opening of mammalian tig (TJ). The peptide antagonists are based on a common and human zonulins, which is believed to be critical binding. They can be prepared by chemical synthesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 47; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New peptide antagonist of zonulin useful as antiinflammatory agent treating cerebral ischemia, stroke, cerebral edema, gastritis, shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This present sequence is that of a peptide antagonist of zonulin (2), one of 25 such peptides (see Y79105-29) of the invention, which bind to a zonula occludens toxin (207) receptor, yet do not
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of mammalian tight
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RESULT
Y79114
                                                        Matches
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                                                                     Query Match
                                                                Local
                                 1 GGGCVQDG 8
                            \vdash
     ω
                          999cvqpg 8
                                                        Similarity 7; Conserv
                                                     Conservative
                                                            85.4%;
87.5%;
                                                    0; Mismatches
                                                           Score 41;
Pred. No.
                                                         DB 21;
3.2e+05;
                                                                Length 8
                                                  Indels
                                                0,
                                                Gaps
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Peptide antagonist of zonulin.
                                                     05-JUN-2000
                                                            Y79114;
                                                                 Y79114 standard; Peptide; 8
                                                    (first entry)
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28-JUL-1999; 17-FEB-2000. hypotensive; immunosuppressive; antipagestrointestinal inflammation; therapy Zonulin; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antiulcer; antiviral; antibacterial; cytostatic; anti-HIV; vulnerary; antiallergic; hypotensive; immunosuppressive; antiparasitic; vasotropic; W0200007609-A1 99WO-US16683

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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mucosal erosion or ulcerations, e.g. gastritis, gastric cancer, collagenous colitis, inflammatory bowel disease, diseases marked by lymphatic obstruction, e.g. congenital intestinal lymphanglectasia, sarcoidosis lymphoma, mesenteric tuberculosis, and after surgical correction of congenital heart disease with Fontan's operation, mucosal diseases without ulceration, e.g. Menetrier's disease, coeliac disease, eosinophilic gastroenteritis, and immune diseases, e.g. systemic lupus erythematosus or food allergies, primarily to
                                                    Zonulin; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antivicer; antiviral; antibacterial; cytostatic; anti-HIV; vulnerary; antiallergic; hypotensive; immunosuppressive; antiparasitic; vasotropic; gastrointestinal inflammation; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    recombinant DNA techniques. The peptide antagonists are used as an antiinflammatory agents in the treatment of gastrointestinal inflammation, where they bind to the 20T receptor in the intestine and yet does not physiologically modulate the opening of TU in the intestine. Gastrointestinal inflammation conditions give rise to increased intestinal permeability and the peptide is useful for treating intestinal conditions that cause protein losing enteropathy caused by infection, e.g. Clostridium difficile infection, enterocolitis, shigellosis, viral gastroenteritis, parasite infestation, bacterial overgrowth, whipple's disease, diseases with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (2), one of 25 such peptides (see Y79105-29) of the invewhich bind to a zonula occludens toxin (ZOT) receptor, physiologically modulate the opening of mammalian tight
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (TJ). The peptide antagonists are based on a common motif of ZOT and human zonulins, which is believed to be critical for receptor and human zonulins, which is believed to be critical for receptor binding. They can be prepared by chemical synthesis or by use of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Page 44; 69pp;
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                  Synthetic
                                                                                                                                                                                           Peptide
                                                                                                                                                                                                                                 05-JUN-2000
                                                                                                                                                                                                                                                                                                          Y79118 standard; Peptide; 8 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                              GGGCVQDG 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present sequence is that of a peptide antagonist of zonul one of 25 such peptides (see Y79105-29) of the invention,
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                                                                                                                                                                                           antagonist
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                                                                                                                                                                                             of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83.3%;
87.5%;
                                                                                                                                                                                             zonulin.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 40; DB 21;
Pred. No. 3.2e+05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ZOT) receptor, yet do not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 8
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Sc binding. Tray can be precised antagonists are user antioning manatory agents in the treatment of gastrointestinal antininianmatory agents in the treatment of gastrointestinal condition where they bind to the ZOT receptor in the intestine and yet does not physiologically modulate the opening of TJ in the CC intestine. Gastrointestinal inflammation conditions give rise to increased intestinal permeability and the peptide is useful for treating intestinal conditions that cause protein losing enteropathy caused by infection, e.g. Clostridium difficile infection, enterocolitis, shigellosis, viral gastroenteritis, parasite infestation, bacterial overgrowth, whipple's disease, diseases with confestation, bacterial overgrowth, whipple's disease, diseases with collagenous colitis, inflammatory bowel disease, diseases marked by lymphatic obstruction, e.g. congenital intestinal lymphanglectasia, correction of congenital heart disease with Fontan's operation, concernation, e.g. disease, without ulceration, e.g. menetrier's disease, coeliac disease, eosinophilic gastroenteritis, and immune disease, e.g. systemic lupus erythematosus or food allergies, primarily to
  New peptide antagonist of zonulin useful as antiinflammatory agent treating cerebral ischemia, stroke, cerebral edema, gastritis, shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    and human zonulins, which is believed to be critical for receptor binding. They can be prepared by chemical synthesis or by use of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          which bind to a zonula occludens toxin (20T) receptor, yet do physiologically modulate the opening of mammalian tight juncti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This present sequence is that of a peptide antagonist of zonulin (2), one of 25 such peptides (see Y79105-29) of the invention,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page 45; 69pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-AUG-1998;
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Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Independent in the opening of mammalian tight junctions. The peptide antagonists are based on a common motif of ZOT
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Y36831
                                                                           RESULT
                                                                                                                                             Query Match
Best Local S
Matches 7
                                      Y36831;
Amino acid sequence of a Chlamydia trachomatis protein.
                   07-OCT-1999
                                                        Y36831 standard; Protein; 196
                                                                                                        ب
                                                                                                                          1 GGGCVQDG
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                                                                                                      l ggvcvqdg
                                                                                                                                            Similarity 7; Conserv
                                                                                                                                              Conservative
                   (first entry)
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                                                                                                                                                      81.2%;
87.5%;
                                                                                                                                             Score 39; DB
Pred. No. 3.2e
0; Mismatches
                                                                                                                                              0;
                                                                                                                                                      3.2e+05;
                                                                                                                                                                DB
                                                                                                                                                                 21;
                                                                                                                                                               Length
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Vaccine; eye disease; paratrachoma; inclusio

lisease; conventional trachoma; inclusion conjunctivitis; genit

bartholinitis;

nongonococcal uretritis; epidymitis;

pneumopathy;

venereal lymphogranulomatosis

is; genital disease; peri cervicitis; salpingitis;

nonendemic trachoma

perihepatitis;

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RESULT
Y79122
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  03-AUG-1998;
                                                                                                    Zonulin; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antiulcer; antiviral; antibacterial; cytostatic; anti-HIV; vulnerary; antiallergic; hypotensive; immunosuppressive; antiparasitic; vasotropic; gastrointestinal inflammation; therapy.
                                              17-FEB-2000
                                                                   WO200007609-A1
                         28-JUL-1999;
                                                                                           Synthetic
                                                                                                                                                                                     Peptide antagonist of zonulin.
                                                                                                                                                                                                                                                                                                                                                                                                                      Y36754-Y37949 are encoded by open reading frames (ORFs) of the genome of Chlamydia trachomatis (see Z01425). The polypeptides can be used as can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye paratrachoma, and inclusion conjunctivitis; genital diseases such as conventional trachoma, nonendemic trachoma, nongonococcal uretritis, epidymitis, cervicitis, salpingitis, and venereal lymphogranulomatosis. The polypeptides of the invention may be of use in treating these diseases.
                                                                                                                                                                                                           05-JUN-2000 (first entry)
                                                                                                                                                                                                                                        Y79122;
                                                                                                                                                                                                                                                     Y79122 standard; Peptide; 8 AA
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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28-NOV-1997;
17-DEC-1997;
                                                                                                                                                                                                                                                                                                             150 ggycvqdg 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 710-711; 1755pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genome sequence of Chlamydia trachomatis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-371125/31.
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                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
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98US-0127815
                     99WO-US16683
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97FR-0015041.
97FR-0016034.
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                                                                                                                                                                                                                                                                                                                                                                  81.2%;
                                                                                                                                                                                                                                                                                                                                                    Score 39; DB
Pred. No. 55;
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                        20;
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                                                                                                                                                                                                                                                                                                                                                                      Length 196;
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CC (TJ). The peptide antagonists are based on a common motif of ZOT CC and human zonulins, which is believed to be critical for receptor CC binding. They can be prepared by chemical synthesis or by use of CC antiinflammatory agents in the treatment of gastrointestinal cCC inflammation, where they bind to the ZOT receptor in the intestine CC inflammation, where they bind to the ZOT receptor in the intestine CC intestine. Gastrointestinal inflammation conditions give rise to increased intestinal permeability and the peptide is useful for CC treating intestinal conditions that cause protein losing enteropathy CC enterocolitis, shighlosis, viral gastroenteritis, parasite CC infestation, becterial overgrowth, whipple's disease, diseases with CC collagenous colitis, inflammatory bowel disease, diseases with CC lymphatic obstruction, e.g. congenital intestinal lymphangiectasia, CC sarcoidosis lymphoma, mesenteric tuberculosis, and after surgical CC conceilac disease, eosinophilic gastroenteritis, and immune disease, CC enilac disease, eosinophilic gastroenteritis, pararily to
Sequence
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Y79128
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Best Local S
Matches 7
                                                  Zonulin; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antiulcer; antiviral;
Synthetic
                        gastrointestinal
                                                antibacterial; cytostatic;
                                                                                                                 Peptide antagonist of zonulin.
                                                                                                                                              05-JUN-2000 (first entry)
                                                                                                                                                                                                  Y79128 standard; Peptide; 8 AA
                                                                                                                                                                                 Y79128;
                                                                                                                                                                                                                                                                           1 GGGCVQDG 8
|| |||||
1 gglcvqdg 8
                                                                                                                                                                                                                                                                                                                                  Local Similarity 87.9
                                                                                                                                                                                                                                        7
                         immunosuppressive; antiparasitic; vasotropic;
                   inflammation;
                                                                                                                                                                                                                                                                                                                                              79.28;
87.58;
                                     anti-HIV; vulnerary; antiallergic;
                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                            Score 38; DB 21;
Pred. No. 3.2e+05;
0; Mismatches 1
                  therapy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sarcoldosis lymphoma, mesenteric tuberculosis, and after surgical correction of congenital heart disease with Fontan's operation, mucosal disease, without ulceration, e.g. Menetrier's disease, coeliac disease, eosinophilic gastroenteritis, and immune disease.
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Key
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                                                                                                                              MAP; piglet fatal gene therapy.
                                                                                                                                                                                                                                 Protein encoded by a reading frame
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
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                                                                  Porcine circovirus
                                                                                                                                                                                                                                                                                                    06-SEP-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                          Y23621;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Y23621 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New peptide antagonist of zonulin useful as antiinflammatory agent for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (UYMA-) UNIV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-JUL-1999;
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7; Conser
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                         Protein; 586
                                                                                                                                                              wasting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             79.28;
                                                                                                                                                                     disease;
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Pred. No. 3.2e
0; Mismatches
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                                                                                                                                                                     vaccine;
                                                                                                                                                                                                                                 of the porcine circovirus genome
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                                                                                                                                                                 circovirus infection;
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ID XXX ACC XXX
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RESULT
G31665
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Best Local
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25-FEB-1999;
05-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence is encoded by a reading frame of the positive strand of a porcine circovirus genome which is associated with MAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 7; Fig 3; 89pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleotide sequence of porcine circovirus MAP against MAP circovirus infection and in gene 1
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Le Cann P;
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                                          25-FEB-2000;
                                                                                                   EP1033405-A2
                                                                                                                               Arabidopsis thaliana
                                                                                                                                                          hybridisation assay; genetic mapping; termination sequence.
                                                                                                                                                                                        Protein identification; signal transduction
                                                                                                                                                                                                                  Arabidopsis thaliana protein fragment SEQ ID NO: 38065
                                                                                                                                                                                                                                                17-OCT-2000
                                                                                                                                                                                                                                                                                                       G31665 standard; Protein; 474 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       transformed cells can be used for gene therapy.
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                                                                                                                                                                                                                                             (first entry)
99US-0121825
99US-0123180
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85.7%;
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No.
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3.1e+02;
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promoter;
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4-0CT-	4-SEP- 8-SEP- 9-SEP-	3-SEP-	6-SEP	13-SEP-	10-SEP	01-SEP	31-AUG	27 - AUG	27 - AUG	27 - AUG	25 - AUG	23 - AUG	23 - AUG	20-AUG	20-AUG	18-AUG	17 - AUG	16-AU	13-AU	12-AU	11-AU	10-AU	09-AU	09-AU	06-AU	06-AU	05-AU	05-AU	04 - AII	04 - AU	03-AU	02-AU	02-AC	02-AC	28-JU	27 - Jเ	27 - Jเ	27 - JU	26-л	23 - Jເ	23-ปีเ	23-J1	22-J	22-J	22-J	22-J	21-1	21-7	20-02	20-0	20-0	19-J	19-	19-	19-	19-	19-	16 -	18.1
4-0CT-	4-SEP- 8-SEP- 9-SEP-	3-SEP-	6-SEP	13-SEP-	10-SEP	01-SEP	31-AUG	27 - AUG	27 - AUG	27 - AUG	25 - AUG	23 - AUG	23 - AUG	20-AUG	20-AUG	18-AUG	17 - AUG	16-AU	13-AU	12-AU	11-AU	10-AU	09-AU	09-AU	06-AU	06-AU	05-AU	05-AU	04 - AII	04 - AU	03-AU	02-AU	02-AC	02-AC	28-JU	27 - Jเ	27 - Jเ	27 - JU	26-л	23 - Jເ	23-ปีเ	23-J1	22-J	22-J	22-J	22-J	21-1	21-7	20-02	20-0	20-0	19-J	19-	19-	19-	19-	19-	16 -	18.1
4-OCT-1999;	4-SEP-1999; 8-SEP-1999; 9-SEP-1999;	2-SEP-1999;	6-SEP-1999;	l3-SEP-1999; l5-SEP-1999;	10-SEP-1999;	01-SEP-1999;	31-AUG-1999;	27-AUG-1999;	27-AUG-1999;	27-AUG-1999;	25-AUG-1999;	23-AUG-1999;	23-AUG-1999;	20-AUG-1999;	20-AUG-1999;	18-AUG-1999;	17-AUG-1999;	16-AUG-1999;	13-AUG-1999;	12-AUG-1999;	11-AUG-1999;	10-AUG-1999;	09-AUG-1999;	09-AUG-1999;	06-AUG-1999;	06-AUG-1999;	05-AUG-1999;	05-AUG-1999	04-AIIG-1999.	04-AUG-1999	03-AUG-1999	02-AUG-1999	02-AUG-1999	02-AUG-1999	28-JUL-1999	27-JUL-1999	27-JUL-1999	27-JUL-1999	26-JUL-1999	23-JUL-1999	23-JUL-1999	23-JUL-1999	22-JUL-1999	22-JUL-1999	22-JUL-1999	22-JUL-1999	21-,7011000	21-1111-1000	20-JUL-1999	20-JUL-1999	20-JUL-1999	19-JUL-1999	19-JUL-1999	19-JUL-199	19-JUL-199	19-JUL-199	19-JUL-199	16-JUL-199	16-1111-109 66T-TOP-CT
4-OCT-1999;	4-SEP-1999; 8-SEP-1999; 9-SEP-1999;	2-SEP-1999;	6-SEP-1999;	l3-SEP-1999; l5-SEP-1999;	10-SEP-1999;	01-SEP-1999;	31-AUG-1999;	27-AUG-1999;	27-AUG-1999;	27-AUG-1999;	25-AUG-1999;	23-AUG-1999;	23-AUG-1999;	20-AUG-1999;	20-AUG-1999;	18-AUG-1999;	17-AUG-1999;	16-AUG-1999;	13-AUG-1999;	12-AUG-1999;	11-AUG-1999;	10-AUG-1999;	09-AUG-1999;	09-AUG-1999;	06-AUG-1999;	06-AUG-1999;	05-AUG-1999;	05-AUG-1999	04-AIIG-1999.	04-AUG-1999	03-AUG-1999	02-AUG-1999	02-AUG-1999	02-AUG-1999	28-JUL-1999	27-JUL-1999	27-JUL-1999	27-JUL-1999	26-JUL-1999	23-JUL-1999	23-JUL-1999	23-JUL-1999	22-JUL-1999	22-JUL-1999	22-JUL-1999	22-JUL-1999	21-,7011000	21-1111-1000	20-JUL-1999	20-JUL-1999	20-JUL-1999	19-JUL-1999	19-JUL-1999	19-JUL-199	19-JUL-199	19-JUL-199	19-JUL-199	16-JUL-199	16-1111-109 66T-TOP-CT
4-OCT-1999; 99US-01	4-SEP-1999; 99US-01 8-SEP-1999; 99US-01 9-SEP-1999; 99US-01	3-SEP-1999; 99US-01	6-SEP-1999; 99US-01	l3-SEP-1999; 99US-01	10-SEP-1999; 99US-01	01-SEP-1999; 99US-0	31-AUG-1999; 99US-0;	27-AUG-1999; 99US-0	27-AUG-1999; 99US-0	27-AUG-1999; 99US-0	25-AUG-1999; 99US-0	23-AUG-1999; 99US-0	23-AUG-1999: 99US-0	20-AUG-1999; 99US-0	20-AUG-1999; 99US-0	18-AUG-1999; 99US-C	17-AUG-1999; 99US-C	16-AUG-1999; 99US-(13-AUG-1999; 99US-(12-AUG-1999; 99US-(11-AUG-1999; 99US-	10-AUG-1999; 99US-	09-AUG-1999; 99US-	09-AUG-1999; 99US-	06-AUG-1999; 99US-	06-AUG-1999; 9975-	05-AUG-1999; 99IIS-	05-AUG-1999: 9976-	04-AUG-1999: 9075	04~AUG-1999: 9976-	03-AUG-1999: 99118-	02-AUG-1999; 9915-	02-AUG-1999; 99US-	02-AUG-1999; 99US-	28-JUL-1999; 99HS-	27-JUL-1999; 99US-	27-JUL-1999; 99US-	27-JUL-1999; 99US-	26-JUL-1999; 99US	23-JUL-1999; 99US	23-JUL-1999; 99US	23-JUL-1999; 99US	22-JUL-1999; 99US	22-JUL-1999; 99US	22-JUL-1999; 990S	22-JUL-1999: 9905	21-JIII1999; 990S	21-JUL-1999; 99US	20-JUL-1999; 99US	20-JUL-1999; 99US	20-JUL-1999; 99US	19-JUL-1999; 99US	19-JUL-1999; 9908	19-JUL-1999; 99US	19-JUL-1999; 9906	19-JUL-1999; 9909	19-JUL-1999; 9908	16-JUL-1999; 990;	16-1111-1999; 990;
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RESULT 10
P93413
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В
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                                                                                                                                                                                                    Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                   06-OCT-1999;
07-OCT-1999;
08-OCT-1999;
                                                                                                    Carbamate hydrolase; Arthrobacter oxidans; methyl 3-hydroxyphenylcarbamate.
          WPI; 1989-341858/47.
N-PSDB; N92585.
                                                                                                                                                     P93413 standard;
Pure carbamate hydrolase isolation from Arthrobacter oxidans -
                                               19-MAY-1988;
                                                          17-MAY-1989;
                                                                    23-NOV-1989
                                                                               EP343100-A.
                                                                                          Arthrobacter
                                                                                                                    Carbamate hydrolase.
                                                                                                                               27-APR-1990
                                                                                                                                          P93413;
                                                                                                                                                                                                                                                                                                                                    14-OCT-1999;
                                     (SCHD)
                                                                                                                                                                               456 gggcvq 461
                                                                                                                                                                                                         Local
                                                                                                                                                                                     1 GGGCVQ 6
                          HD,
                                     SCHERING AG
                                                                                                                                                                                                    Similarity 100 6; Conservative
                                                                                          oxidans DSM 4044.
                                                                                                                               (first entry)
                          Boidol W;
                                                                                                                                                                                                                                         99US-0161404
99US-0161405
99US-01613406
99US-0161359
99US-0161360
99US-0161361
99US-0161361
                                                                                                                                                                                                                                                                                                         99US-0159638.
99US-0159584.
99US-0160741.
99US-0160767.
99US-0160768.
99US-0160770.
                                                                                                                                                                                                                         99US-0161992.
99US-0161993.
99US-0162142.
                                                                                                                                                                                                                                                                                                                                                                                   99US-0157865.
99US-0158029.
99US-0158232.
                                               88DE-3381738
                                                          89EP-0730123
                                                                                                                                                    protein; 493 AA.
                                                                                                                                                                                                  75.0%; Pr
100.0%; Pr
0;
                                                                                                                                                                                                                                                                                              -0160814.
-0160815.
                                                                                                                                                                                                                                                                               -0160989.
                                                                                                                                                                                                                                                                                                                                               0159331.
                                                                                                                                                                                                                                                                                          0160980
                                                                                                                                                                                                          Score 36;
Pred. No.
                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                         DB 21;
3.6e+02;
                                                                                                          phenmedipham;
                                                                                                                                                                                                              Length 474;
                                                                                                                                                                                                     Indels
                                                                                                                                                                                                    0
able
                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                     0
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ρy
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                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 5
    21-APR-1999
23-APR-1999
23-APR-1999
28-APR-1999
30-APR-1999
30-APR-1999
04-MAY-1999
06-MAY-1999
06-MAY-1999
11-MAY-1999
11-MAY-1999
14-MAY-1999
                                                                                                                                                                                                                                                                                                                                   рнР52.
                                                                                                                                                                                                                         17-OCT-2000
                                                                                                                                                                                                                                    G31664;
                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                         06-SEP-2000
                                                                                                                                                                                                                                                         11
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Purified carbamate hydrolase can be used to isolate/identify A.oxidans carbamate hydrolase gene system. This system makes plants resistant to the herbicide phenmedipham. Carbamate hydrolase has pH optimum 6.8, mol. wt. 50-60kp, isoelectric point 6.2, and can cleave phenmedipham to methyl 3-hydroxyphenylcarbamate, m-toluidine and CO2, so inactivating it. It is produced by A.oxidans DSM 4044 which contains the 41 kb plasmid
                                                                                                                                                                                                                                                                                                                                                                                                     destroy herbicide phenmedipham, and DNA encoding it, resistance to plants.
                                                                                                                                                                                                                                                                                                                                                           Disclosure; Fig 7; 17pp;
2 GGCVQDG 8
                                         Similarity
5; Conser
                                                                                                                                                 493
                                           Conservative
                                                                                                                                                 Ą
                                                                 75
71
                                                             . 48;
                                                                                                                                                                                                                                                                                                                                                             German.
                                     Score 36; DB Pred. No. 3.7e. 2; Mismatches
                                         2
                                       DB 10; I
3.7e+02;
hes 0;
                                                                               Length 493;
                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                        for imparting
                                           0
                                         Gaps
                                           0
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Protein identification; signal transduction pathway; metabolic pathway; hybridisation assay; genetic mapping; gene expression control; promoter; termination sequence.

S. Arabidopsis thaliana.
X. EP1033405-A2.
X. O6-SEP-2000.

25-FEB-1999; 99US-0123180.
25-FEB-1999; 99US-0123180.
05-MAR-1999; 99US-0123548.
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99US-0147302
                                                                                                                              This sequence represents the human type II collagen alpha-chain which CC is used in a method to produce an immunoassay kit comprising of two CC antibodies (Ab1 and Ab2), mono- or poly-clonal, or their fragments, CC II collagen fragment that is released from degraded cartilage). The kits immunoassays, specifically enzyme-linked CC serum or synovial fluid). The kits are used for therapy, diagnosis (e.g. cc routhes screening for arthritis and other cartilage diseases, also to CC diagnose growth disorders), prognosis (e.g. monitoring progression of CC growth hormone) and for drug screening (to identify, and assess efficacy of, anti-arthritic agents and matrix metalloprotease inhibitors). CC IIIree, derived from the N-terminus of the alpha I chain, have CC concentration that allows accurate measurement by immunoassay.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Immunoassay kit containing two antibodies recognising coupled epitope(s) on collagen fragments - and new antibodies, for diagnosing arthritis etc., also prognosis and screening for anti-arthritic agents or inhibitors of matrix metallo-protease
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       Similarity 85.76; Conservative
                                                                                                                         1487 AA;
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                          75.0%;
85.7%;
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100.0%; Pred. No.
tive 0; Mismatc
       0,
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    Mismatches
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                     DB 19;
le+03;
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Length 1487;

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Gaps

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13-SEP-1999; 15-SEP-1999; 16-SEP-1999; 20-SEP-1999; 22-SEP-1999; 23-SEP-1999;

10-SEP-1999;

20-AUG-1999 20-AUG-1999 20-AUG-1999 23-AUG-1999 23-AUG-1999 23-AUG-1999 25-AUG-1999 26-AUG-1999 27-AUG-1999 27-AUG-1999 31-AUG-1999 31-AUG-1999 31-AUG-1999 31-AUG-1999

11-AUG-1999 12-AUG-1999 13-AUG-1999 13-AUG-1999 16-AUG-1999 17-AUG-1999 18-AUG-1999

05-OCT-1999; 06-OCT-1999; 07-OCT-1999;

B 5

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gscvqdg 38

GGCVQDG

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RESULT 15
W88389
ID W88389
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W88384
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                                                                                                                                       Best Local Similarity
Matches 6; Conser
                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                  This peptide comprises the first epidermal growth factor-like domain (EGF-1), i.e. amino acid residues 105-135, of human Zneul (see W88381), a new neuro-growth factor-like protein. Zneul can be used as a growth, maintenance, or differentiation factor in the spinal cord, heart, spleen, testis, thyroid and lymph nodes. It may also play a role in breast cancer, glioblastomas, and pituitary adenomas. Zneul may also be used to treat Alzheimer's disease, cancer, to repopulate blood cells after chemotherapy, to stimulate myofibroblast proliferation, stimulate or inhibit growth factors made in the placenta, in fertility and contraception, or to respond to the placenta, in fertility and contraception, or to respond to the placenta, in fertility and contraception, or to respond to the placenta, in fertility and contraception, or to respond to the placenta, in fertility and contraception, or to respond to the placenta, in fertility and contraception, or to respond to the placenta.
W88389 standard; Protein; 73
                                                                                                                                                                                                                                            including specific Zneul, can be used diagnostic assays.
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                                                                                                                                                                                                                 Sequence
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18-JUN-1997;
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                                                                                                                                                                                                                                                                                         regenerate nerves.
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97US-0050143
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                                                                                                                                                                                                                                                         Claimed Zneul polypeptides (see also W88382-97), domains of Zneul and epitope-bearing portions of to raise specific antibodies for use e.g. in
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to repopulate blood
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75.08;
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Pred.
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Search completed: June Job time: 663 sec

13,

2001, 14:25:44

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                                                                                                                     This claimed polypeptide comprises amino acid residues 105-177 of the human Zneul mature protein (see W88382), i.e. the 2 epidermal growth factor-like domains (see also W88384-85) of Zneul. Zneul is a new neuro-growth factor-like protein that can be used as a growth, maintenance, or differentiation factor in the spinal cord, heart, spleen, testis, thyroid and lymph nodes. Zneul may also play a role in breast cancer, glioblastomas, and pituitary adenomas. Zneul can be used to treat Alzheimer's disease, cancer, to repopulate blood cells after chemotherapy, to stimulate myofibroblast proliferation, stimulate or inhibit growth factors made in the placenta, in fertility and contraception, or to regenerate nerves. Claimed Zneul polypeptides (see also W88382-97), including specific domains of Zneul and epitope-bearing portions of Zneul, can be used to raise specific antibodies for use e.g. in
                                               Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                          Zneul, can i
diagnostic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zneu-1; neuro-growth factor-like protein; human; breast cancer;
glioblastoma; pituitary adenoma; Alzheimer's disease; therapy;
nerve regeneration; haematopoiesis; fertility; contraception;
                                                                                                                    Sequence
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18-JUN-1997;
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10
                         1 GGGCVQDG 8,
ggscvqpg
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                                                   Conservative
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97US-0050143
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                                                                                                                                                                                                                                                                                                                                                                                           polypeptides - used to, e.g. treat Alzheimer's to repopulate blood cells
                                                               72.9%;
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                                                                           Length 73;
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GenCore version Copyright (c) 1993 - 2000

Compugen

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Title:
Perfect score:
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Listing first 45 summaries
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1: pir1:*
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198801 seqs, 68722935 residues
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Gapop 10.0 ,
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S34583
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S22634
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                                A7097
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68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	69.8	69.8	70.8	70.8	70.8	70.8	70.8
323	188	161	141	132	131	131	131	130	626	561	695	685	681	680	633
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G83067	н38192	A46189	I40577	KRGT3J	T05837	KRGT3M	KRSHA3	KRSH3A	T27319	T27318	T36007	T40162	S37809	XJBYTK	T47524
hypothetical prote	chitin synthase (E	vasotocin - Pacifi	hypothetical prote	keratin high-sulfu	hypothetical prote	keratin high-sulfu	keratin high-sulfu	keratin high-sulfu	hypothetical prote	hypothetical prote	probable transketo	transketolase - fi	transketolase (EC	transketolase (EC	hypothetical prote

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A; Molecule type: mRNA
A; Residues: 1491 <GRA>
A; Cross references: EMBL:
C; Superfamily
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R;Nah, H.D.; Upholt, W.B.
J. Biol. Chem. 266, 23446-23452, 1991
A;Title: Type II collagen mRNA containing
A;Reference number: S18250; MUID:92078225
                                                                                                                                                                          C;Accession: S56753
R;Grant, C.E.; Vasa, M.Z.; Deeley, R.G.
Nucleic Acids Res. 23, 2137-2146, 1995
A;Title: cIRF-3, a new member of the interferon regulatory
A;Reference number: S56753; MUID:95334365
A;Accession: S56753
A;Status: preliminary; nucleic acid sequence not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Gene: COL2A1

G;Superfamily: collagen alpha 1(1) chain; fibrillar collagen carboxyl-terminal horizontamily: collagen alpha 1(1) chain; fibrillar collagen carboxyl-terminal horizontamily: collagen alpha 1(1) chain; extracellular matrix; glycoprotein e;10-25/Domain: signal sequence #status predicted <SIG>
E;10-25/Domain: signal sequence #status predicted <PRO>
E;26-104/Domain: amino-terminal propeptide #status predicted <PRO>
E;36-95/Domain: con Willebrand factor type C repeat homology <PWC>
E;36-95/Domain: con Willebrand factor type C repeat homology <PWC>
E;36-95/Domain: con Willebrand factor type C repeat homology <PWC>
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E;36-95/Domain: con Willebrand factor type C repeat homology <PWC>
E;36-95/
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C:Species: Gallus gallus (chicken)
C:Date: 10-Oct-1995 #sequence_revision 03-Nov-1995 #text_change 21-Jul-2000
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S56753
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Best Local Similarity
"~+~hes 7; Conserva
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C;Genetics:
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A; Residues: 1-206 <NAH>
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nces: EMBL:U20338; NID:g790580; PIDN:AAA86995.1; PID:g790581 lymphoid-specific interferon regulatory factor
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Query Match

85.48;

Score 41;

DB

2

Length 491;

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sphingomyelin phosphodiesterase (EC 3.1.4.12) precursor - N;Alternate names: sphingomyelinase c
                                                        RESULT
S22634
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A;Gene: TC0628
C;Superfamily: septum formation protein maf
                                                                                                                                                                                                                                                                                       A;Molecule type: DNA
A;Residues: 1-196 <TET>
A;Cross-references: GB:AE002331; GB:AE002160; NID:g7190662; PIDN:AAE39457.1; PID:g719066
A;Experimental source: strain Nigg (MoPn)
                                                                                                                                                                                                                                                                                                                                                                                                   R:Read, T.D.; Brunham, R.G.; Shen, C.; Gill, S.R.; Heidelberg, J.F.; White, O.; Hickey, C.; Dodson, R.; Gwinn, M.; Nelson, W.; DeBoy, R.; Kolonay, J.; McClarty, G.; Salzberg, N:Title: Genome Sequences of Chlamydia trachomatis Mopn and Chlamydia pneumoniae AR39. A; Accession: H81681
                                                                                                                                                                                                                                                                                                                                                                                             A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Accession: H81681
R;Read, T.D.; Brunh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        maf protein TC0628 [imported] - Chlamydia muridarum (strain Nigg)
C;Species: Chlamydia muridarum, Chlamydia trachomatis MoPn
C;Date: 31.Mar-2000 #sequence_revision 31.Mar-2000 #text_change 19.May-2000
                                                                                                                                                                                             Matches
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Best Local
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Best Local Similarity
"atches 7; Conserv:
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A;Title: Genome sequence of an obligate intracellular pathogen of humans: Chlamydia tracel, Accession: F71525
A;Accession: F71525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: GB:AE001308; GB:AE001273; NID:g3328766; PIDN:AAC67944.1; PID:g33287.
A;Experimental source: serotype D, strain UW-3/Cx
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A; Residues: 1-196 <ARN>
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Matches 7; Conservative
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87.5%;
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Pred. No. 9.4;
0; Mismatches
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Pred. No. 9.4;
0; Mismatches
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0; Mismatches
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     Leptospira interrogans
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C;Accession: 550820
R;Scott, J: Leeck C: Forney, J.
Nucleic Acids Res. 22, 5079-5084, 1994
A;Title: Analysis of the micronuclear B type
A;Reference number: $50820; MUID:95098630
A;Accession: $50820
                                                                                                                                                                                                                            surface protein type 51B - Paramecium tetraurelia C;Dspecies: Paramecium tetraurelia C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 C;Accession: S50820
A; Molecule type: DNA
A; Residues: 1-2395 <;
          A;Status: preliminary; nucleic acid sequence not shown; translation not shown
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S50820
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C;Keywords: zinc finger
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A; Residues: 27-99 <YAN>
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Nucleic Acids Res. 23, 3403-3410, 1995
A;Title: A novel DNA-binding domain that may form a single zinc finger motif.
A;Reference number: S59850; MUID:96032831
A;Accession: S59851
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Best Local Similarity /5...
">+ hes 6; Conservative
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A; Residues: 1-302 <SHU>
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A;Accession: S59853
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A;Reference number: S59852
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C;Date: 15-Feb-1996
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Best Local Similarity 85.,.,
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Conservative
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A;Molecule type: DNA
A;Molecule type: SNA
A;Molecule type: DNA
A;Molecul
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A;Title: Molecular analysis of a sphingomyelinase C gene from Leptospira interrogans A;Reference number: $22634; MUID:90307220
A;Accession: $22634
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C;Date: 04-Dec-1992 #sequence_revision 04-Dec-1992 #text_change 08-Oct-1999
C;Accession: S22634; S10466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240 GGGCGEDG 247
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85.7%;
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Pred. No. 21;
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Pred. No. 24;
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A:Status: preliminary; nucleic acid sequence not shown; translation not shown A; Molecule type: DNA A; Molecule type: DNA A; Molecule type: DNA A; Residues: 1-457 «GLA» A; PIDN: CAA51614.1; PID: 9413982 A; Mote: the nucleotide sequence was submitted to the EMBL Data Library, June 1993 A; Kunst, F.; Ogasawara, N.; Moszer, I.; Albertini, A.M.; Alloni, G.; Azevedo, V.; C.; Bron, S.; Broulllet, S.; Bruschi, C.V.; Caldwell, B.; Capuano, V.; Carter, N.M. A.; Ehrlich, S.D.; Emmerson, P.T.; Entian, K.D.; Errington, J.; Fabret, C.; Ferrar Nature 390, 249-256, 1997 A; Authors: Foulger, D.; Fritz, C.; Fujita, M.; Fujita, Y.; Fuma, S.; Galizzi, A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                endonuclease IV - Methanobacterium thermoautotrophicum (strain Delta H)
C;Specles: Methanobacterium thermoautotrophicum
C;Specles: Methanobacterium thermoautotrophicum
C;Date: 05:Dec-1997 #sequence_revision 05-Dec-1997 #text_change 08-Oct-1999
C;Accession: G69001
R;Accession: G69001
R;Smith, D.R; Doucette-Stamm, L.A; Deloughery, C; Lee, H; Dubois, J; Aldredge, T;
R;Smith, D.R; Doucette-Stamm, L.A; Deloughery, C; Lee, H; Dubois, J; Aldredge, T;
Qiu, D; Spadafora, R; Vicaire, R; Wang, Y; Wierzbowski, J; Gibson, R; Jiwani,
ki, S; Church, G,M; Daniels, C,J; Mao, J; Rice, P; Noeiling, J; Reeve, JN.
J; Bacteriol. 179, 7135-7155, 1997
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A;Genetic code: SGC5
A;Introns: 472/3; 1310/3; 1821/3
C;Superfamily: G surface protein
                                                                                                                                                                                                                                                                                                                                                                                                              probable aldehyde dehydrogenase (NAD+) (EC 1.2.1.3) ywdH - Bacillus subtili: N;Alternate names: protein ipa-58r C;Species: Bacillus subtilis C;Species: Bacillus subtilis C;Date: 07-oct-1994 #sequence_revision 26-May-1995 #text_change 20-Jun-2000 C;Accession: S39713; C70054 R;Glaser, P.; Kunst, F.; Arnaud, M.; Coudart, M.P.; Gonzales, W.; Hullo, M.
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S39713
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A;Cross-references: GB.AE000874; GB:AE000666; NID:g2622110; PIDN:AAB85506.1; PID:g26221A;Experimental source: strain Delta H
                                                                                                                                                                                                                                                                              A; Reference number: A; Accession: S39713
                                                                                                                                                                                                                                                                                                  A., Rappport, G.; Danchin, A.
Mol. Microbiol. 10, 371-384, 1993
A;Title: Bacillus subtilis genome
A;Reference number: S39655; MUID:
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C;Superfamily: Methanobacterium
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Best Local S
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Best Local Similarity
Matches 6; Conserv
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5; Conserv
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71.48;
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; MUID:95020537
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Pred. No.
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29;
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  A.; Galles
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M.; Chc
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A; Cross-references: (
A; Experimental source
C; Genetics:
A; Gene: ywdH
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S09118
G surface protein 168 - Paramecium primaurelia
C:Species: Paramecium primaurelia
C:Species: Paramecium primaurelia
C:Date: 30-Sep-1991 #sequence_revision 30-Sep-1
C:Accession: S09118
R:Prat, A.
J. Mol. Biol. 211, 521-535, 1990
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                                                                                                                                                                                                                                                               A;Title: Conserved sequences flank variable A;Reference number: S09118; MUID:90172419 A;Accession: S09118 A;Accession: S09118 A;Residues: 1-2704 <PRA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Superfamily: aldehyde dehydrogenase (NAD+); aldehyde C;Keywords: oxidoreductase F;4-265/Domain: aldehyde dehydrogenase homology <ALDD>
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                                                                                                                                                                                A; Genetic code: SGC5
C; Superfamily: G surface
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C;Genetics:
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                                                                             Query Match
Best Local S
Matches 6
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Best Local S
Matches 6
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                                      GGGCVQDG
                                                                             h 77.1%;
Similarity 75.0%;
6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                391
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ce: strain 168
                                                                                                                                                                                                                                              EMBL: X52133;
                                                                                                                                                                                  protein
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85.78;
                                                                             Score 37; DB Pred. No. 2.2e 0; Mismatches
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2.2e+02;
2;
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45;
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د.
                                                                                                                      Length 2704;
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A23475
G surface protein - Paramecium primaurelia
C;Species: Paramecium primaurelia
C;Date: 31-Mar-1989 #sequence_revision 31-Mar-1989
C;Accession: A23475
R;Prat, A.; Katinka, M.; Caron, F.; Meyer, E.
J. Mol. Biol. 189, 47-60, 1986

#text_change

A;Title: Nucleotide sequence of the Param A;Reference number: A23475; MUID:87060934 A;Accession: A23475 A;Molecule type: DNA

of the Paramecium

primaurelia

G

surface

protein.

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A;Introns: 28/1; 93/1; 104/3; 116/3
C;Superfamily: collagen alpha 1(I) chain; fibri
C;Keywords: coiled coil; extracellular matrix;
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R;Finer, M.H.; Aho, S.; Gerstenfeld, L.C.; Boedtker, H.; Doty, P.
J. Biol. Chem. 262, 13323-1332, 1987
A;Title: Unusual DNA sequences located within the promoter region and the first intron A;Reference number: A29367; MUID:88007542
                                                                                                                                                      A;Cross-references: GB:M17607
C;Genetics:
                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-144 <FI2>
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A; Residues: 1-153 <FIN>
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A;Title: Construction and characterization A;Reference number: A27179; MUID:88058316
A;Accession: A27179
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 collagen alpha 1(I) chain precursor - chicken (fragment) C; Species: Gallus gallus (chicken) C; Date: 05-oct-1988 #sequence_revision 05-oct-1988 #text C; Accession: A27179; A29367
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A;Status: preliminary; nucleic acid sequence not shown; translation not shown A;Mesidues: 1-145 <mth> CMTH> 
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                                                                                                                                               Genetics:
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A;Note: the authors translated to
C;Genetics:
A;Genetic code: SGC5
C;Superfamily: G surface protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local ;
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100.0%; Pr
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Pred. No. 2.3e+02;
0; Mismatches 2;
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                fibrillar collagen
trix; glycoprotein;
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   carboxyl-terminal homology;
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A;Gene: CESP:E01G4.2
A;Map position: 2
A;Introns: 47/3; 69/3; 105/3; 224/3; 400/3
C;Superfamily: Caenorhabditis elegans hypothetical
                                                                                                                                                             A; Experimental source: C; Genetics:
                                                                                                                                                                      A; Cross-references: EMBL: z83223; p
A; Experimental source: clone E01G4
                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-434 <WIL>
                                                                                                                                                                                                                                 A;Status: preliminary; translated
                                                                                                                                                                                                                                                      A; Reference number: A; Accession: T20400
                                                                                                                                                                                                                                                                                                                                                                                      T20400
                                                                                                                                                                                                                                                                    Submitted to the EMBL Data A, Reference number: 219269
                                                                                                                                                                                                                                                                                                         hypothetical protein E01G4.2 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 04-Mar-2000
C;Accession: T20400
R;Sims, M.
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A;Authors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G. A;Reference number: A70500; MUID:98295987
A;Accession: A70547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Experimental C; Genetics:
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090643 gallus gall
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p11445 escherichia
008327 bacillus st
p23182 citrobacter
p55115 caenorhabdi
012630 kluyveromyc
p23254 saccharomyc
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p02442 capra hircu
p30581 aspergillus
p30583 merricella
p82371 lactococcus
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p94669 clostridium
p34751 caenorhabdi
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          MEDLINE-95020537; PubMed-7934828; Glaser P., Kunst F., Arnaud M., Coud Hullo M.F., Ionescu M., Lubochinsky Presecan E., Santana M., Schneider E Rapoport G., Danchin A.; "Bacillus subtilis genome project: c
                                                                                   SEQUENCE FROM N.A.
                                                                                                        Bacillus/Staphylococcus
NCBI_TaxID=1423;
                                                                                                                             Bacillus subtilis.
Bacteria; Firmicutes;
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30-MAY-2000 (Rel. 39, Last annotation update)
SPHINCOMYZLINASE C PRECURSOR (EC 3.1.4.12) (SPHINGOMYELIN
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S22634; S22634.
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genome project: cloning and sequencing of the
                                                                                                                                                                                                                                                                                                                                                              27
556
63268
                                                                                                                                                                                                                                                                                                                   81.2%;
85.7%;
                                                                                                             Bacillus/Clostridium group;
us group; Bacillus.
                                                                                                                                                                                                                                                                                                                                                               MW;
                                                                                                                                                                                                                                                                                                                  Score 39;
Pred. No. 1
                     , Coudart M.P., Gonza
iinsky B., Marcelino I
ider E., Schweizer J.
                                                                                                                                                                                                                                                                                                                                                        POTENTIAL.
SPHINGOMYELINASE C.
; 6D0EACDB9A5CD6FD CRC64;
                                                                                                                                                                                                                                                                                                        Mismatches
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(EC 1.2.1.3).
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11;
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                                            Gonzales W.,
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                       J., Wosze
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                                                                                                                                                                                                                                                                                                       Indels
                                  Moszer
                                                                                                                                                                                                                                                                                                     0;
   97
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G168_PARPR
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                           "Conserved sequences flank variable tandem repeats in two alleles of the G surface protein of Paramecium primaurelia.";

J. Mol. Biol. 211:521-535(1990).

-i- FUNCTION: THIS PROTEIN IS THE SURFACE ANTIGEN OR IMMOBILIZATION ANTIGEN OF PARAMECIUM PRIMAURELIA.

-i- SUBCELLULAR LOCATION: ATTACHED TO THE MEMBRANE BY A GPI-ANCHOR. STRUCTURE WITH 37 PERIODS INTERNAL HOMOLOGIES AND A HIGHLY PERIODIC STRUCTURE WITH 37 PERIODS OF ABOUT 75 RESIDUES, EACH PERIODIC CONTAINING 8 CYSTEINES, EXCEPT FOR FOUR HALF PERIODS. A VARIABLE PART OF 475 RESIDUES COMPRISES 4 ALMOST IDENTICAL PERIODS IN THE
                                              -
                                                                                                                                                                                                                                                                                                                                                01-AUG-1990
01-AUG-1990
01-AUG-1990
                                                                                                                                                                                                                      MEDLINE=90172419; PubMed=2308165;
                                                                                                                                                                                                                                          SEQUENCE FROM N.A. STRAIN=168;
                                                                                                                                                                                                                                                                                                                                                                                    G168_PARPR
P17053;
                                                                                                                                                                                                                                                                                         Paramecium primaurelia.
Eukaryota; Alveolata; Ciliophora; Oligohymenophorea; Peniculida;
Paramecium.
                                                                                                                                                                                                                                                                         NCBI_TaxID=5886;
                                                                                                                                                                                                                                                                                                                              168G
                                                                                                                                                                                                                                                                                                                                    .68G SURFACE
                                                                                                                                                                                                                                                                                                                                                                                                                                                            385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its modified and this statement is not removed. Usage by non-profit institutions as long as its content is in no way entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- CATALYTIC ACTIVITY: ALDEHYDE + NAD(+) + H(2)O = ACID + NAD-!- SIMILARITY: BELONGS TO THE ALDEHYDE DEHYDROGENASES FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 kb region from 325 degrees to 333 degrees."; Mol. Microbiol. 10:371-384(1993).
                (14-32 DEGREES CELSIUS)
SIMILARITY: 98% TO THE
PERIODIC STRUCTURE AND
OF THE PROTEIN.
                                                            MIDDLE OF THE PROTEIN.
MISCELLANEOUS: EXPRESSION OF G
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6; Conserv
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(Rel.
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(Rel. 15, Last sequence up
(Rel. 15, Last annotation
PROTEIN PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
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85.78;
                            80% IN T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 37; DB
Pred. No. 19;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                         THE
                                      FORM 156G
                                                           PROTEIN OCCURS AT
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                        VARIABLE
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                        DOMAIN
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IN THE MIDDLE
                                                        LOW TEMPERATURES
                                                                                 PERIODS IN THE
                                                                                             VARIABLE
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G156_PARPS
G156_PARPS
ID G156_P
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Best Local
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01-JAN-1990
01-AUG-1990
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                 entities
or send a
                                                                                        This SWISS-PROT entry is copyright. It is produced through a collab between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for conmodified and this statement is not removed. Usage by and for conmodified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Nucleotide sequence of the Paramecium primaurelia A huge protein with a highly periodic structure.";
J. Mol. Biol. 189:47-60/1986\
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                        MIDDLE OF THE PROTEIN.

-I- MISCELLANEOUS: EXPRESSION OF G
(14-32 DEGREES CELSIUS).

-I- SIMILARITY: 98% TO THE ALLELIC
PERIODIC STRUCTURE AND 80% IN V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; X52133; CAA36378.1;
PIR; S09118; S09118.
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Paramecium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Paramecium primaurelia
Eukaryota; Alveolata; (
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13837;
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FUNCTION: THIS PROTEIN IS THE SURFACE ANTIGEN OR IMMOBILIZATION ANTIGEN OF PARAMECIUM PRIMAURELIA.

SUBCELLULAR LOCATION: ATTACHED TO THE MEMBRANE BY A GPI-ANCHOR.
MISCELLANEOUS: IT HAS INVERNAL HOMOLOGIES AND A HIGHLY PERIODIC STRUCTURE WITH 37 PERIODS OF ABOUT 75 RESIDUES, EACH PERIOD CONTAINING 8 CYSTEINES, EXCEPT FOR FOUR HALF PERIODS. A VARIABLE PART OF 475 RESIDUES, COMPRISES 4 ALMOST IDENTICAL PERIODS IN THE
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6; Conser
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                                   requires a license agreement (See http://www.isb-sib.
n email to license@isb-sib.ch).
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PRECURSOR.
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37 x 75 AA APPROXIMATE REPEATS.
VARIABLE DOWAIN, COMPRISES 4 AI
IDENTICAL REPEATS.
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VARIABLE DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              37;
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                               PROTEIN OCCURS AT LOW TEMPERATURES
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THE MIDDI
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EMBL outstation •
trictions on its
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                     pfam; pF00135; COesterase; 1
proSITE; pS00122; CARBOVE
pROSITE; pS00022; CARBOVE
proSITE; pS00047
                                                                         EMBL; M94965; AAA22078.1;
EMBL; A1923; CAA01069.1;
PIR; S27481; S27481
PIR; A45737; A45737.
HSSP; P21836; 1MAH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ARTOX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUL-1993
01-JUL-1993
01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Signal;
SIGNAL
                                                                                                                                             entities requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                                                                   use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                                                                                            the
                                                                                                                                                                                                                                                                       "Purification and properties of an Arthrobacter oxydans P52 carbamate hydrolase specific for the herbicide phenmedipham and nucleotide sequence of the corresponding gene.";

J. Bacteriol. 174:6600-6607(1992).

-i- FUNCTION: MAY DECRADE THE PHENYLCARBAMATE HERBICIDES PHENMEDIPHAM AND DESMEDIPHAM COMETABOLICALLY BY HYDROLYZING THEIR CENTRAL CARBAMATE LINKAGES. CONVEYS RESISTANCE TO THE HERBICIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          201470;
          Hydrolase;
ACT_SITE
                                                                                                                                                                                                       between
                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-93015712;
                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=1671;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Plasmid
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PIR; A23475; A23475.
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                                                                                                                                                                                                                                                                                                                                                                                                                          Actinomycetales;
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                                                                                                                                                                                          ween the Swiss Institute of Bioinfi
European Bioinformatics Institute
                                                                                                                                                                                                                                      SUBUNIT: MONOMER. SIMILARITY: BELONGS
                                                                                                                                                                                   SWISS-PROT entry is copyright. It is produced and the Swiss Institute of Bioinformatics and the reason the Swiss Institute. There are no
                                                                                                                                                                                                                                                               PHENMEDIPHAM
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        PS00122; CARBOXYLESTERASE_B_1; 1.
PS00941; CARBOXYLESTERASE_B_2; 1.
PS00941; CARBOXYLESTERASE_B_2; 1.
188 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                        FROM N.A.,
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                                                                                                                                                                                                                                                                                                                                                                                                                        utes; Actinobacteria; Actinobact
Micrococcineae; Micrococcaceae;
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2560
222
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53728
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₩;
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3.1.1.-) (PHENYLCARBAMATE HYDROLASE).
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Pred.
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37 X 75 AA APPROXIMATE REPEATS.
88% TO PARAMECIUM TETRAURELIA A
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W; 97BE359AB9C7C298 CRC64;
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No.
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99;
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15

GGCLEDG 21

STANDARD;

2 GGCVQDG 8

Matches Query Match Best Local

Local

Similarity 5; Conser

75.0%; 71.4%;

Conservative

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SEQUENCE OF 1311-1453 FROM N.A.

MEDILINE-80134546; PubMed-6987088;
Showalter A.M., Pesciotta D.M., Eikenberry E.F.,
Pastan I., Decrombrughe B., Fietzek P.P., Olsen
"Nucleotide sequence of a collagen cDNA-fragment
Carboxyl end of pro alpha 1(I)-chains.";
FEBS Lett. 111:61-65(1980)
-1- FUNCTION: TYPE I COLLAGEN IS A MEMBER OF GROU
                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Sequence determination and analysis of the 3' region of chicken pro-
alpha 1(I) and pro-alpha 2(I) collagen messenger ribonucleic acids
including the carboxy-terminal propeptide sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-72243016; PubMed-5047697;
Eyre D.R., Glimcher M.J.;
"Evidence for a previously undetected sequence at the of the alpha 1 chain of chicken bone collagen.";
Biochem. Biophys. Res. Commun. 48:720-726(1972).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Amino acid sequence of chick skin collagen alpha 1(I)-CB8 and complete primary structure of the helical portion of the chick Biochemistry 21:2048-2055(1982).
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SEQUENCE OF 1-144 FROM N.A.
MEDILING-88007542; PubMed-2820966;
Finer M.H., Aho S., Gerstenfeld L.C.,
"Unusual DNA sequences located within
first intron of the chicken pro-alpha
J., Biol. Chem. 262:13323-13332(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Highberger J.H., Corbett C., Dixit S.N., Kang A.H., Gross J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 1-153 FROM N.A. MEDILINE-88056316; PubMed-3678834; Finer M.H., Boedtker H., Doty P.; "Construction and characterization of cDNA clones encoding the Chicken pro alpha 1(1) collagen mRNA."; the Chicken pro alpha 1(1) collagen mRNA.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COLLAI.
Gallus gallus (Chicken).
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
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(Rel. 12, Last sequence update)
(Rel. 38, Last annotation update)
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the promoter region and
1(I) collagen gene.";
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LESULT 8

PCK5_MOUSE STANDARD;

AC Q04592; 062040;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-CT-2000 (Rel. 40, Last sequence update)
DT 01-CCT-2000 (Rel. 40, Last sequence update)
DE PROPROTEIN CONVERTASE SUBTILISIN/KEXIN TYPE 5 PRECURSOR (EC 3.4.21.-...)
DE (PROPROTEIN CONVERTASE PC5) (SUBTILISIN/KEXIN-LIKE PROTEASE PC5)

CONVERTASE PC5) (PC6) (SUBTILISIN-LIKE PROPROTEIN CONVERTASE 6)
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DR EMBL, M17838. AAA48704.1;

DR EMBL; W00401; CAA23695.1;

DR EMBL; W10571; AAA48672.1;

DR EMBL; M10571; AAA48672.1;

DR PIR, AA22857; CGCGHIS.

DR PIR, A27179; A27179

DR PIR, A27367; A29367

DR InterPro; IPR000085;

DR InterPro; IPR000085;

DR InterPro; IPR000087;

PR InterPro; IPR000087;

DR InterPro; IPR000087;

DR InterPro; IPR000087;

DR Pfam; PF01410; COLFF; 1.

DR Pfam; PF01391; COLFF; 1.

DR Pfam; PF01391; COLFF; 1.

PF PF1; PF00093; vwc; 1.

PROSITE; PS01208; VWFC; 1.

WEXTRACELIULAR MALTIX; Connective tissue; Repeat; Hydroxylation; TSUALL 1 122; Signal.
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HYDROXYLATION (POTENTIAL).

HYDROXYLATION (POTENTIAL).

HYDROXYLATION (POTENTIAL).

HYDROXYLATION (POTENTIAL).

HYDROXYLATION (ONLY 3-HYDROXYPRO AND THE GOLY HYDROXYLATED PRO IN POSITION X (IN THE G-X-Y UNIT IN THE ALPHA 1(I) CHAIN)).

F -> L (IN REF. 5).

O -> H (IN REF. 5).

O -> H (IN REF. 6).
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Pred. No. 83;
0; Mismatches
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COLLAGEN ALPHA :
C-TERMINAL PROPI
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ALPHA 1(I) CHAIN.
PROPEPTIDE.
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SEQUENCE OF 981-1453 FROM N.A. MEDLINE-81160715; PubMed-6927845;

COLLAGEN)

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"Murine subtilisin-like proteinase SPC6 is expressed during embryonic (1 implantation, somitogenesis, and skeletal formation.";

Lev. Genet. 21:75-81(1997);

C. -- FUNCTION: LIXELY TO REPRESENT A WIDESPREAD ENDOPROTEASE ACTIVITY WITHIN THE CONSTITUTIVE AND REGULATED SECRETORY PATHWAY. CAPABLE CONTINITY THE RX(K/R)R CONSENSUS MOTIF. MAY BE RESPONSIBLE CONFORTED OF GASTROINTESTINAL PEPTIDES. MAY BE RESPONSIBLE FOR THE MATURATION OF GASTROINTESTINAL PEPTIDES. MAY BE RESPONSIBLE OF GROWTH FACTORS.

C. IN THE CELLULAR PROLIFERATION OF ADRENAL CORTEX VIA THE ACTIVATION OF GROWTH FACTORS.

C. PROPROTEINS BY CLEAVAGE OF MATURE PROTEINS FROM THEIR PROPROTEINS BY CLEAVAGE OF ARG-XAA-YAA-ARG-1-ZAA BONDS, WHERE XAA CAN BE ANY AMINO ACID AND YAA IS ARG OR LYS.

C. SUBECLLULAR LOCATION: PC5A IS SECRETED THROUGH THE REGULATED SECRETORY PATHWAY. PC5B IS A TYPE I MEMBRANE PROTEIN LOCALIZED TO A PARABUCLEAR POST-GOLGI NETWORK COMPARTMENT IN COMMUNICATION WITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                De Bie I., Marcinkiewicz M., Malide D.,
Bendayan M., Seldah N.G.;
"The isoforms of proprotein convertase
subcellular compartments.";
J. Cell Biol. 135:1261-1275(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Identification and functional expression of a new member of the mammalian Kex2-like processing endoprotease family: its striking structural similarity to PACE4.";
J. Biochem. 113:132-135(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "SPC4, SPC5, and the novel protease SPC7 morphogenetic proteins at distinct sites y Cell Biol. 134:181-191(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nakagawa T., Hosaka
Nakayama K.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PARTIAL SEQUENCE,
MEDLINE-97103178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           candidate proprotein convertase expressed nonendocrine cells.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lusson J., Vieau D., Hamelin J., Day R., Chretien M., Seidah "CDNA structure of the mouse and rat subtilisin/kexin-like PC candidate proprotein convertase expressed in endocrine and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-Adrenal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nakagawa T., Murakami K.,
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STRAIN-ICR; TISSUE-Intestine;
MEDLINE-93327934; PubMed-8335106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rancourt S.L., Rancourt D.E.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-96293359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEVELOPMENTAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-93342056;
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ALTERNATIVE PRODUCTS: AT LEAST 2 ISOFORMS; PC5B/LONG (SHOWN HERE AND PC5A/SHORT; ARE PRODUCED BY ALTERNATIVE SPLICING.
TISSUE SPECIFICITY: PC5A IS EXPRESSED IN MOST TISSUES BUT IS MOS ABUNDANT IN THE INTESTINE AND ADRENALS. PC5B IS EXPRESSED IN THE INTESTINE, ADDENALS, AND LUNG BUT NOT IN THE BRAIN.
DEVELOPMENTAL STAGE: WEAKLY EXPRESSED THROUGHOUT THE EMBRYO, EXCEPT IN THE DEVELOPING MERVOUS SYSTEM, THE RIBS AND THE LIVER, BUT MARKEDLY UPREGULATED AT DISCRETE SITES DURING DEVELOPMENT. A
                                                                                                                                                                                                                            EARLY ENDOSOMES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PubMed-8341687;
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during embryogenesis.";
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E6.5, PROMINENT EXPRESSION OBSERVED IN DIFFERENCIATED DECIDUA. AT E7.5, INTENSE EXPRESSION IN EXTRABBRYONIC ENDODERM, AMNOIN AND NASCENT MESODERM. AT 8.5, ABUNDANT EXPRESSION IN SOMITES AND YOLK SAC FOLLOWED BY A CONFINATION TO DERMAMYOTOME COMPARTMENT. BETWEEN E9.5 AND E11.5, ABUNDANT EXPRESSION IN AER (THICKENED ECTODERMAL CELLS OF LIMB BUDS). AT E12.5, EXPRESSION IN THE LIMBS IS CONFINED TO THE CONDENSING MESENCHYM SURROUNDING THE CARTILAGE. AT THIS STAGE, STRONG EXPRESSION ALSO DETECTED IN VERTEBRAL AND FACIAL CARTILAGE PRIMORDIA AND IN THE MYSCLE OF THE TONGUE. AT E16.5, ABUNDANT EXPRESSION IN EPITHELIAL CELLS OF THE INTESTINAL VILLI. ISOFORM B OCCUR AT E12.5.

-I. DOMAIN: THE PROPERTIDE DOMAIN ACTS AS AN INTRAMOLECULAR CHAPERONE ASSISTING THE FOLDING OF THE ZYMOGEN WITHIN THE ENDOPLASMIC
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RETICULUM

SIMILARITY: BELONGS TO SUBTILASE FAMILY. DOMAIN: AC 1 AND AC 2 (CLUSTERS OF ACIDIC AMINO ACIDS) SORTING INFORMATION. AC 1 DIRECTS TGN LOCALIZATION AND WITH THE TGN SORTING PROTEIN PACS-1. PEPTIDASE FAMILY ; 8s ALSO KNOWN AS CONTAIN

SIMILARITY: CONTAINS 1 HOMO B/P DOMAIN

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R InterPro; IPR00209; .

DR Pfam; PF01483; P; 1.
DR Pfam; PF00183; Peptidase_SB; 1.
DR PRINTS; PR00723; SUBTILASE_ASP; 1.
DR PROSITE; PS00136; SUBTILASE_HIS; 1.
PROSITE; PS00136; SUBTILASE_SER; 1.
PROSITE; PS00138; SUBTILASE_SER; 1.
Serine protease; Glycoprotein; Zymogen; Signal; fbasic residues; Repeat; Alternative splic.

The province of the protein of the pro
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01-JUL-1989 (Rel. 11, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
HYPOTHETICAL 29 KDA PROTEIN IN MITOCHONDRIAL S-1 DNA (URF
Zea mays (Maize).
                                                                                                                                                                                                                                                                                                         MISCELLANDOUS: THE MITOCHONDRIA FROM THE S MALE-STERILE CYTOPLASM OF MAIZE CONTAIN UNIQUE DNA-PROTEIN COMPLEXES, DESIGNATED S-1 AND S-2. THESE COMPLEXES CONSIST OF DOUBLE-STRANDED LINEAR DNAS WITH PROTEINS COVALENTLY ATTACHED TO THE 5' TERMINI.
                                                                                                                                                                                   X02451; -; NOT_ANNOTATED_CDS.
                                                                                                                                             l protein; Mitochondrion; plasmid
256 AA; 29338 MW; BlD6DB31E402D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Embryophyta; Tracheophyta; Spermatophyta; Poales; Poaceae; PACC clade; Panicoideae;
                                                                             Score 35; DB
Pred. No. 25;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                            Levings C.S. III;
S-1 mitochondrial
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SING (IN ISOFORM PC5A).
EC850E2DF20EA1C3 ·CRC64;
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                                                              Query Match
Best Local
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                                                                                                    Ecogene; EG10064; argB.
InterPro; IPR001048;
Pfam; PF00696; aakinase; 1.
Arginine biosynthesis; Transferase; Kinase.
SEQUENCE 258 AA; 27159 MW; 8B916B8CBC143738 CRC64;
                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to licensee(isb-sib.ch).
                                                                                                                                                                            EMBL; M21446; AAA23478.1; --
EMBL; U00006; AAC43065.1; --
EMBL; AE000470; AAC76941.1;
PIR; JT0331; KIECAE.
                                                                                                                                                                                                                                                                                                                                                             - SUBCELLULAR LOCATION: CYTOPLASMIC (POTENTIAL).
-- SIMILARITY: BELONGS TO THE ACETYLGLUTAMATE KINASE FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ARGB_ECOLI STANDARD;
p11445;
01-0CT-1989 (Rel. 12, Cr.
01-0CT-1989 (Rel. 12, La.
30-MAY-2000 (Rel. 39, La.
ACETYLGUTAMATE KINASE (
43 GGGCVVD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
STRAIN=K12 / MG1655;
MEDLINE=94089392; Pul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.

MEDLINE=89121510; PubMed=2851495;
Parsot C., Boyen A., Cohen G.N., Glansdorff N.;
"Nucleotide sequence of Escherichia coli argB and argC genes:
comparison of N-acetylglutamate kinase and N-acetylglutamate-gamma-
semialdehyde dehydrogenase with homologous and analogous enzymes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Analysis of the Escherichia coli genome. region from 89.2 to 92.8 minutes."; Nucleic Acids Res. 21:5408-5417(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Blattner F.R., Daniels D.L.;
                      1 GGGCVQD 7
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AAC43065.1; -.
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rland V.D., Plun
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85.7%;
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SEQUENCE FROM N.A.
Paillard M., Sederoff

Eukaryota; Viridiplantae; I Magnoliophyta; Liliopsida;

Zea.

Plasmid S-1.

"Nucleotide sequence

f R.R., of the

EMBO J. 4:1

4:1125-1128(1985).

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GGSCVQD 1116

1 GGGCVQD 7

YMS4_MAIZE P10580; 01-JUL-1989

STANDARD;

Query Match Best Local S Matches 6

Similarity 85.7 6; Conservative

75.0%; 85.7%;

VARSPLIC SEQUENCE

916 1877

AA;

1877 A; 209287

RESULT 10 ARGB_ECOLI

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Similarity 5; Conserv

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MaizeDB; 696; Hypothetical

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01-NOV-1991 (Rel. 20, I
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CITROLYSIN PROTEIN 1.
Citrobacter freund11.
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O08327;

O1-NOV-1997 (Rel.

O1-NOV-1997 (Rel.

30-MAY-2000 (Rel.
                                                                                 al Zabg A., Pemberton J.M.;
al Zabg A., Pemberton J.M.;
"DNA sequence of haemolysin genes from Citrobacter freundii.";
"EMS Microbiol. Lett. 49:131-135(1988).
-1- FUNCTION: BACTERIAL HEMOLYSINS ARE EXOTOXINS THAT ATTACK BLOOD
-1- FUNCTION: BACTERIAL HEMOLYSINS ARE BY MECHANISMS NOT CLEARLY
                                                  Hemolysis.
SEQUENCE
                                                                                                                                                                                    Citrobacter.
NCBI_TaxID=546;
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Takata H. Takaha T., Okada S., Takagi M., Imanaka T.;

"Characterization of a gene cluster for glycogen biosynthesis
heterotetrameric ADP-glucose pyrophosphorylase from Bacillus
stearothermophilus.";

J. Bacteriol. 179:4689-4698(1997).

-I- FUNCTION: REQUIRED FOR THE SYNTHESIS OF GLYCOGEN.
-I- SIMILARITY: TO ADP-GLUCOSE PYROPHOSPHORYLASE.
                                                                            PIR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bacillus stearothermophilus.
Bacteria; Firmicutes; Bacillus/Clostridium
Bacillus/Staphylococcus group; Bacillus.
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343 AA; 38
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HYPOTHETICAL ZINC N
                                                    15-JUL-1998
15-JUL-1998
30-MAY-2000
Kluyveromyces lactis (Yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycetales; Saccharomycetaceae;
                                            TRANSKETOLASE
                                                                                       Q12630;
                                                                                                 TKT1_KLULA
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STRAIN-BRISTOL N2;
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                                                                                                                                                                                                                                                                            Hypothetical protein;
METAL 255 25;
ACT_SITE 256 25;
METAL 259 25;
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HSSP; P07584;
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use by non-profit institutions as long as its content
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NCBI_TaxID=6239;
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PROSITE; PS00142; ZINC_PROTEASE; 1.
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InterPro; IPR001506;
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SIMILARITY: BELONGS TO PEPTLDASE FAMILY MIZA (ZINC
METALLOPROTEASE); ALSO KNOWN AS THE ASTACIN SUBFAMILY.
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62.5%;
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ZINC (CATALYTIC). (BY SIMILARITY).

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B584 MW; A98D3721C8ADE489 CRC64;
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Caenorhabditis.
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 Saccharomycotina; Saccharomycetes; Setaceae; Kluyveromyces.
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                            MEDLINE-94043273; PubMed-8226984;
Sundstroem M., Lindqvist Y., Schneider G., Hellman
"Yeast TKL1 gene encodes a transketclase that is r
efficient glycolysis and biosynthesis of aromatic
J. Biol. Chem. 268:24346-24352(1993).
SEQUENCE FROM N.A. STRAIN-S288C / AB9
                                                                                                                                  SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-92144611; PubMed-1737042; Fletcher T.S., Kwee I.L., Nakada T., Larg "DNA sequence of the yeast transketolase Biochemistry 31:1892-1896(1992).
                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                     Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes; Saccharomycetales; Saccharomycetaceae; Saccharomyces. NCBI_TaxID=4932;
                                                                                                                                                                                                                                                                    TKT1_YEAST STANDARD; PRT; 679 AA 01-NOV-1991 (Rel. 20, Created) 01-FEB-1996 (Rel. 33, Last sequence update) 15-JUL-1998 (Rel. 36, Last annotation update) TRANSKETOLASE 1 (EC 2.2.1.1) (TK 1).
TKL1 OR YPR074C OR YP99499.29C.
                                                                                                                                                                                                                                                         Saccharomyces cerevisiae (Baker's yeast).
                                                                                                                                                                                                                                                                                                                                                                         YEAST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                between the Swiss Institute of Bioinformatics and the Ethe European Bioinformatics Institute. There are no rest modified and this statement is not removed. Usage by an entities requires a license agreement (See http://www.lsb-or send an email to license@isb-sib.ch).
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PROSITE; PS00801; TRANSKETOLASE_1;
PROSITE; PS00802; TRANSKETOLASE_2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation
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"Analysis of a transketolase gene from kluyveromyces lactis that the yeast enzymes are more related to transketolases of prokaryotto origins than to those of higher eukaryotes.";

Curr. Genet. 31:15-21(1997).

"I CATALYTIC ACTIVITY: SEDOHEPTULOSE 7-PHOSPHATE + D-GLYCER 3-PHOSPHATE - D-RIBOSE 5-PHOSPHATE + D-XYLUTLOSE 5-PHOSPHATE."

"I COFACTOR: THIAMINE PYROPHOSPHATE."

"I SUBUNIT: HOMODIMER (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                      156 GDGCLQEG 163
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Pfam; PF00456; transket
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Eur. J. Block...
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-!- CATALYTIC ACTIVITY: SEDOHEPTULOSE 7-PHOSPHATE +
3-PHOSPHATE = D-RIBOSE 5-PHOSPHATE + D-XYLULOSE
-!- COFACTOR: THIAMINE PYROPHOSPHATE. REQUIRES MAGNE
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MEDLINE-98062276; PubMed-9398292;
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"Refined structure of transketolase from Saccharomyces cerevisiae
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MEDLINE-92331588; pubMed-1628611;
Lindqvist V., Schneider G., Ermler U., Sundstroem M.;

"Three-dimensional structure of transketolase, a thiamine diphosphate dependent enzyme, at 2.5-A resolution.";

EMBO J. 11:2373-2379(1992).
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Johnston M., Andrews S., Brinkman R., Cooper J., Ding H., Du Favello A., Fulton L., Gattung S., Greco T., Kirsten J., Kuc Hallsworth K., Hawkins J., Hillier L., Jier M., Johnson D., Johnston L., Langston Y., Latreille P., Lef T., Mardis E., Me Miller N., Nhan M., Pauley A., Peluso D., Rifken L., Riles L Taich A., Trevaskis E., Vignati D., Wilcox L., Wohldman P., Submitted (MAR-1996) to the EMBL/GenBank/DDBJ databases.
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Nixon P.F., Duggleby R.G.;
"The N-terminal amino acid
                                 L; M63302; AAA35168.1;
L; X73224; CAA51693.1;
L; Z79219; CAA89191.1;
L; Z71255; CAA94982.1;
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SIMILARITY: BELONGS TO THE TRANSKETOLASE FAMILY.
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Pfam; PF00456; transketolase; 1.
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142

AATYNKPG -> DMPLTTSRA (IN REF. 1).

233

AQA -> RQR (IN REF. 1).

236

LIKMTTTIGYGSLHA -> FDQNDHNHWLRFLRS

(IN REF. 1).

382

L -> LVLPTL (IN REF. 1).

395

D -> S (IN REF. 1).

537

RQNLPOLEGSS -> PDKTCHNWKVAL (IN REF. 1).

538

SGKAPEVFKFFGFTDEGVAERAQKTIAFYKGDKLISPLKKA
F -> PVRHQKSSSSSVSPQKVLLKELKRPLHSIRVTS

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Q41801 zea mays (m
Q9vzk2 drosophila
Q24140 drosophila
Q27167 paramecium
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                                                                                                                                                                                                                                                                                                                                                                                   Signal.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=92078225; PubMed=1744138;
Nah H.D., Upholt W.B.;
Nah H.D., Upholt W.B.;
"Type II collagen mRNA containing an alternatively spliced exon predominates in the chick limb prior to chondrogenesis.";
J. Biol. Chem. 266:23446-22452(1991).
EMBL; M74435; AAA48714.1;
INTERPRO; IPR001087; -.
INTERPRO; IPR001007; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COLLAGEN TYPE 2 PRECURSOR (FRAGMENT).
Gallus gallus (Chicken).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasiani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   PFAM; PF00093; vwc; 1.
PFAM; PF01391; Collagen; 1.
PROSITE; PS01208; VWFC; 1.
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35 GGCVQDG 41
                                 2 GGCVQDG 8
                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                               185
206
206
                                                                                                                           Conservative
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>206
206
20793 M
                                                                                                                                                      87.5%; Score 42; 100.0%; Pred. No.
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COLLAGEN TYPE 2.
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                                                                                                                           Mismatches
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                                                                                                                                                          DB 13; Length 206; . 3;
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Query Match
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Best Local S
                              SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

Read T.D., Brunham R., Shen C., Gill S.R., Heidelberg J.F.,
Hickey E.K., Peterson J., Umayam L.A., Utterback T., Berry H.
Bass S., Linher K., Weidman J., Khouri H., Craven B., Bowmar
Dodson R., Gwinn M., Neison W., DeBoy R., Kolonay J., McClar
Salzberg S.L., Eisen J., Fraser C.M.;
Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AE002331; AAF39457.1;
TIGR; TC0628;
                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                            SEQUENCE FROM N.A.

STRAIN-MODEN / NIGG;

MEDLINE-20150255; PubMed-10684935;

MEDLINE-20150255; PubMed-10684935;

Read T.D., Brunham R.C., Shen C., Gill S.R., Heidelberg J.F.,

White O., Hickey E.K., Peterson J., Utterback T., Berry K., Bass S.,

Linher K., Weidman J., Khouri H., Craven B., Bowman C., Dodson R.,

Gwinn M., Nelson W., DeBoy R., Kolonay J., McClarty G., Salzberg S.L.,

"Genome Sequences of Chlamydia trachomatis MoPn and Chlamydia

Nucleic Acids Res. 28:1397-1406(2000)
                                                                                                                                                                                                                                                                           Q9PK45
Q9PK45;
01-OCT-2000
01-OCT-2000
01-OCT-2000
                                                                                                                                                                                                                                       Chlamydia muridarum.
Bacteria; Chlamydiales;
                                                                                                                                                                                                                                  NCBI_TaxID-83560;
                                                                                                                                                                                                                                                               FC0628
                                                                                                                                                                                                                                                                                                                                                                                                                         "Genome sequence of an obligate intracellular pathogen of humans: Chlamydia trachomatis.";
Science 282:754-759(1998);
EMBL; AE001308; AAC67944.1;
SEQUENCE 196 AA; 21978 MW; E0B6CFFD52F93073 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-D/UW-3/CX;
MEDLINE-99000809; PubMed-9784136;
Stephens R.S., Kalman S., Lammel C.
Mitchell W.P., Olinger L., Tatusov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     084353;
084353;
01-NOV-1998
01-NOV-1998
01-MAY-2000
                                                                                                                                                                                                                                                                                                                                                           150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chlamydia trachomatis.
Bacteria; Chlamydiales;
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NCBI_TaxID=813;
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                                                                                                                        Acids Res. 28:1397-1406(2000).
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7; Conserv
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(TrEMBLrel.
                             21730 MW;
   81.2%;
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87.5%;
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   Score
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Last sequence update)
Last annotation updat
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                       9B86B059E52D78A5 CRC64;
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Last sequence update)
Last annotation update)
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  39;
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DB
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Query Match
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Q9LGT0
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Q41801;
Q41801;
01-NOV-1996 (TrEMBLrel 0
01-NOV-1996 (TREMBLrel 0
01-NOV-1999 (TREMBLrel 1
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Best Local
                                SEQUENCE FROM N.A.
STRAIN-H84; TISSUE-LEAF;
MEDLINE-96032831; PubMed-7567449;
                                                                                                                                                                                             Eukaryota; Viridiplantae; |
Magnoliophyta; Liliopsida;
NCBI_TaxID=4577;
                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN=H84; TISSUE=LEAF;
                                                                                                                                                   Submitted
                                                                                                                                                             Shuichi Y
                                                                                                                                                                                                                          Zea mays (Maize).
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Matches
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01-OCT-2000 (
P0489A01.11 P
P0489A01.11.
                                                                                 nagisawa S.;
novel DNA-binding domain that may form a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oryza sativa (Rice).
Eukaryota; Viridiplantae; I
Magnoliophyta; Liliopsida;
NCBI_TaxID-4530;
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                                                                                                                                      (JUN-1994) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity 87.97; Conservative
                                                                                                                                                                                                                                                                                PRELIMINARY;
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75.08;
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    Score
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Last sequence update)
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                         B7826F297211B9AD CRC64;
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   38;
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RESULT
Q9VZK2
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                                                                                                                                                                       A Abril J.F. Agbayani A., An H.-J. Andrews-Pfankoch C., Baldwin D.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottler P.,
RA Burtis K.C., Busam D.A., Butler H., Cadeu E., Center A., Chandra I.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Fosler C., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Harris N.L., Harvey D., Heiman T.J., Wei M.-H., Ibegwam C.,
RA Harris N.L., Mattel B., Kolish F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
RA Lasko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
RA Liu X., Mattel B., McIntosh T.C., McLeod M.P., McPherson D. L.,
RA Merkulov G., Milshina N.Y., Mobarry C., Morris J., Moshrefi A.,
RA Palazzolo M., Pittman G.S., Pan S., Pollard J., Putl V., Reese M.G.,
RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
RA Shue B.C., Siden-Klamos I., Sinpson M., Skupski M.P., Smith T.,
RA Shue E., Spradling A.C., Stapleton M., Strong R., Sun E.,
RA Williams S.M., Woodsey T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Yells S.M., Woodsey T., Zhong W., Zhong S., Yao Q., Zheng L.,
RA Zheng X.H., Zhong F. N., Zhong W., Zhon S., Zhao Q., Zheng L.,
RA Zheng X.H., Zhong F. N., Zhong W., Zhou S., Zhao Q., Zheng L.,
RN Linch S.M., Woodsey T., Worley K.C., Wu D., Yang S., Yao Q.A.,
Then genome sequence of Drosophila melanogaster.";
RN Linch S.M., Suppleton M., Shung S., Zho Q., Zheng L.,
RN Linch S.M., Suppleton M., Zhong W., Zhou S., Zhu X., Smith H.O.,
RN Linch S.M., Suppleton M., Zhong S., Zho Q., Zheng L.,
RN Linch S.M., Suppleton M., Zhong W., Zhou S.
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Matches 6; Conserv
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O1-MAY-2000 (TrEMBLrel. ]
O1-MAY-2000 (TrEMBLrel. ]
O1-OCT-2000 (TrEMBLrel. ]
SCRT PROTEIN (SCRATCH).
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Park S., Sequeira Celniker S.E.;
              Galle R., George R.A., Harris N.L., Hoskins R.A., Evans-Holm M., Houston K.A., Hummasti S.R., Kim E., Li P., Moshrefi M., Pacleb J.M., Park S., Sequeira A., Sethi H., Snir E., Svirskas R.R., Weinburg T.,
                                                                                         Rubin G.M., Wan
Agbayani A., Arc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Musc
Ephydroidea; Drosophilidae; Drosophila.
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                                                                      Wan K.H., Harvey D., Lewis S.E., Brokstein Arcaina T.T., Baxter E., Blazej R.G., Butt havez C., Chew M., Doyle C.M., Farfan D.E.,
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ROARK M., Sturtevant M.A., Emery J., Va
"scratch, a pan-neural gene encoding a
snail, promotes neuronal development.";
Genes Dev. 9:2384-2398(1995).
EMBL; U36477; AAA91035.1; -.
HSSP; P25490; 1UBD.
FLYBASE; FB900004880; SCrt.
INTERPRO; IPR000822; -.
PFAM, PF00096; zf-C282; 5.
                                     01-NOV-1996
01-NOV-1996
01-MAY-2000
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EMBL; AF145627; AAD38602.1; -
EMBL; AF145627; AAD38602.1; -
HSSP; P25490; 1UBD.
FLYBASE; FB9D0004880; Scrt.
INTERPRO; IPR000822;
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PROSITE: PSO0028; ZINC_FINGER_C2H2;
Zinc-finger; Metal-binding; DNA-binc
SEQUENCE 664 AA; 72569 MW; 687F;
                                                                                       Q27167
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-CCT-2000 (TrEMBLrel. 15, Last annotation update)
NEURON SPECIFIC ZINC FINGER TRANSCRIPTION FACTOR.
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PROSITE; PS00028; ZINC_FINGER_C2H2;
ZINC_FINGER_SEATH-binding; DNA-bind
SEQUENCE 653 AA; 70774 MW; 15C2
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                          SURFACE PROTEIN.
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Neoptera; Endopterygota; Diptera;
a; Drosophilidae; Drosophila.
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W; 687F2DAABFE8968F CRC64;
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TRANSCRIPTION FACTOR.
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SEQUENCE FROM N.A. STRAIN-STOCK 51;

Paramecium. NCBI_TaxID≃5888; [1]

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RESULT
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""" hes 6; Conservative
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Q1-NOV-1996
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PRODOM; PD001561; -; 1.
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NCBI_TaxID=12458;
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INTERPRO: IPRO01680;
INTERPRO: IPRO01680;
INTERPRO: IPRO02895;
PEAM; PF01508; Paramecium_SA; 28.
PROSITE; PS00241; RECEPTOR_CYTOKINES_1; UNKNOWN_1.
PROSITE; PS00678; WD_REPEATS; UNKNOWN_1.
SEQUENCE 2395 AA; 246430 MW; 8632E022649B2D61
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BMBL; U07603; AAA81947.1;
EMBL; L04795; AAA16710.1;
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                Q9U5K8
                                                                                                                                                                                                                                                                                                                    Endonuclease.
                                                                                                                                                                                                                                                                                                                                                   PFAM; PF01261; AP_endonulease2; 1.
                                                                                                                      185 GGGCIRD 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           027091;
01-JAN-1998
01-JAN-1998
01-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STRAIN-DELTA H;
MEDLINE-98037514; PubMed-9371463;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Methanobacterium thermoautotrophicum.
Archaea; Euryarchaeota; Methanobacteriales; Methanobacteriaceae;
Methanobacterium.
                                                           12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=2166;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   027091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tsuneyoshi T., Sumi S.;

"Differentiation among garlic viruses in mixed infections "Differentiation among garlic viruses in mixed infections PCR procedures and direct tissue blotting immunoassays.";
Phytopathology 86:253-259(1996).

EMBL; D11161; BAA01933.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INTERPRO; IPR001896; -- PRAM; PF01307; Plant_vir_prot; PR0DOM; PD001561; -; 1.
                                                                                                                                                                 1 GGGCVQD 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              garlic latent virus.
Viruses; ssRNA positive-strand
NCBI_TaxID=12458;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-OCT-2000 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     47 GGCYQDG
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                                                                                                                                                                                                          Similarity
5; Conserv
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       PRELIMINARY;
                                                                                                                                                                                                       Conservative
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;; 11917 MW;
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71.48;
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85.78;
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                                                                                                                                                                                              Score 37; DB
Pred. No. 32;
2; Mismatches
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Last sequence update)
Last annotation update)
    PRT;
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32;
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                                                                                                                                                                                                                                    Length 279
                                                                                                                                                                                                                                                                                                    CRC64;
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Q9U5K8; Q1-MAY-2000 (TremBLrel. 13, Q1-MAY-2000 (TremBLrel. 13, Q1-OCT-2000 (TremBLrel. 15, GROUP 3 HOMEODOMAIN PROTEIN.

Last sequence update)
Last annotation update)

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Best Local
Matches
                                                                                        Query Match
Best Local :
                                                                 Matches
                                                                                                                                                                                                                  PROSITE;
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                         variable surface proteins from Paramecium tetraurelia. J. Mol. Biol. 222:835-841(1991). EMBL; M65163; AAA61739.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.

MEDLINE=92106337; PubMed=1762150;

Nielsen E., You Y., Forney J.;

Nielsen E., You Y., Forney J.;

"Cysteine residue periodicity is a conserved for the co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-FEB-1997 (TrEMBLrel.
01-FEB-1997 (TrEMBLrel.
01-MAY-2000 (TrEMBLrel.
51A SURFACE PROTEIN.
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094710;
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PRINTS; PRO0031; HTHREPRESSR.
PROSO2T; HOMEOBOX_1; 1.
PROSITE; PS50071; HOMEOBOX_2; 1.
HOMEOBOX; DNA binding; Nuclear prosequence 379 AA; 41448 MW; 9:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (NOV-1999) to EMBL; X92654; CAB61208 HSSP; P02833; ISAN.
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Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insect
Pterygota; Neoptera; Orthopteroidea; Orthoptera; Caelifera;
Acridomorpha; Acridoidea; Acrididae; Schistocerca.
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INTERPRO: IPRO01356; -.
PFAM; PF00046; homeobox;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Paramecium.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=5888;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Alveolata; Ciliophora; Oligohymenophorea; Peniculida;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Paramecium
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                                                                                                                                                                                                                                                                                                                 NTERPRO;
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GGGCVQDG
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                                                                                                                                                                                                     Similarity 75.0 6; Conservative
                                                           Similarity 6; Conserv
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dorf B., Schroeder
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75.08;
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75.08;
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                                                       Score 37; DB
Pred. No. 3e+0
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95950C5B494D19A8 CRC64;
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                                                                                        DB 5;
3e+02;
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                                                                                                                      Length 2717;
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RESULT
Q99217
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AC Q9
AC Q9
DT Q9
DT Q1

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Best Local S
Matches 6
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Q99227;
01-NOV-1996
01-NOV-1996
01-JUN-2000
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                                                                     SEQUENCE FROM N.A.
MEDILINE=92321501; PubMed=1621990;
Adams M.E., Huang D.Q., Yao L.Y.,
"Extraction and isolation of mRNA
Anal. Biochem. 202:89-95(1992).
                                                                                                                                                                                                      "The human type II procollagen gene: identification protein-coding domain and location of potential reguin the promoter and first intron.";
                                                                                                                                                                                                                                                                                                                                                                                                              COL2A1
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01-MAY-2000
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                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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NCBI_TaxID=5888;
                                                     Anal. Biochem. 202:89-95(1
EMBL; M60299; AAA73873.1;
                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
MEDLINE=91184811; PubMed=2081599;
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                                    [NTERPRO;
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PPO; IPRO02895; -.
PPO1508; Paramecium_SA; 33.
TE; PS00107; PROTEIN_KINASE_ATP;
TE; PS00678; WD_REPEATS; UNKNOWN.
NCE 2721 AA; 280341 MW; 63078
                     PRO; IPR001007; PF00093; vwc;
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   PS01208;
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``~~^lata; Ciliophora;
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Pred.
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                                                                                          Sandell L.J.;
from adult articular cartilage.";
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FT CHAIN 26 103 POTENTIAL.
FT NONL-TER 103 103 COLLAGEN ALPHA 1(II) CHAIN.
FT NONL-TER 103 AN: 11039 MN; E56E8CD2167086AB CRC64:
SD SEQUENCE 103 AA: 103 AA: 11039 MN; E56E8CD2167086AB CRC64:
SD SEQUENCE 103 AA: 11039 MN; E56E8CD216708AB CRC64:
SD SEQUENCE 103 AA: 11039 MN; E56E8CD216708AB CRC64:
SD SEQUENCE 103 AA: 11039 MN; E56E8CD216708AB CRC64:
SD SEQUENCE 103 AA: 11
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Result
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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1: /cgn2_6/ptodata/2,
2: //gn2_6/ptodata/2,
3: /cgn2_6/ptodata/2,
4: /cgn2_6/ptodata/2,
5: //gn2_6/ptodata/2,
6: /cgn2_6/ptodata/2,
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  June 13, 2001, 14:27:06; Search time 78.71 Seconds (without alignments) 1.953 Million cell updates/sec
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Gapop 10.0 , Gapext 0.5
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  DB
             US-07-615-448A-7
US-08-196-361-7
US-08-446-934-7
US-08-446-703-7
US-08-446-128-7
US-08-455-355-1
US-08-455-355-1
US-08-451-355-2
US-08-469-412A-7
US-08-313-1356-2
US-08-143-365A-10
US-08-143-365A-10
US-08-143-365A-10
US-08-11-57B-2
US-08-11-157B-2
US-08-11-151A-31
US-08-701-191A-13
US-08-701-191A-31
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Sequence
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Sequence 2, Appli
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; TYPE: AMINO &
; TOPOLOGY: lir
; MOLECULE TYPE:
US-07-615-448A-7
                                                       LENGTH:
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1 US-07	44 32 66.7 77 45 32 66.7 77
1 US-07-921-807B-	32 66.7 32 66.7
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2 116-08	
1 US-08	32 66.7
1 US-07-640-029-	32 66.7
1 US-08	32 66.7
1 US-08-471-570-	32 66.7
2 US-08-455-355-	32 66.7
2 US-08-455-355-	32 66.7
2 US-08-426-125-	32 66.7
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1 US-08-070-165F-	32 66.7
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APPLICANY: Streber, Wolfgang
TITLE OF INVENTION: PROCESS FOR THE ISOLATION AND
TITLE OF INVENTION: CHARACTERISATION OF A GEME ENZYME SYSTEM FOR INACTIVATION
TITLE OF INVENTION: OF THE HERBICIDE PHENNEDIPHAN AND TRANSFER OF THE GENE
TITLE OF INVENTION: OF THE HERBICIDE PRODUCE HERBICIDE-TOLERANT PLANTS
NUMBER OF SEQUENCES:

ADDRESSE: OSTOCKES:

ADDRESSE: OSTOCKES:

ADDRESSE: OSTOCKES:

CITY: New York
COTY: New York
COUNTRY: USA

ZIP: 10046-6403

COMPUTER EADABLE FORM:
MEDIUM TYPE: PLOPY disk
COMPUTER: LAW FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: PATENTION BATA:
COMPUTER: DATE: 1990119

CURRENT APPLICATION UNMBER: US/O7/615,448A
FILING DATE: 1990119

CLASSIFICATION NUMBER: US/O7/615,448A
PPLICATION NUMBER: US/O7/615,448A
PRICAGENT INFORMATION:
NAME: Dennis, Manette
REGISTRATION NUMBER: 30,623
REFERENCE/DOKET NUMBER: 30,623
REFERENCE/DOKET NUMBER: 30,623
REFERENCE/DOKET NUMBER: 30,623
REFERENCE/DOKET NUMBER: F-8366(CIP)(951-64)

TELECOMMUNICATION INFORMATION:
TELEX: 236925
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 493 and nino acids
TYPE: AMINO ACID
TOPOLOGY: Linear
MOLECULE TYPE: protein
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/ MOLECULE TYPE:
US-08-196-361-7
                                                            Query Match
Best Local Similarity
Matches 5; Conserv
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US-08-196-361-7
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TELEFAX: 212-382-0888
TELEX: 236925
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 493 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                           APPLICATION UNMBER: DE P3817384.0
FILING DATE: 19-MAY-1988
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 07/353,871
FILING DATE: 18-MAY-1989
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 07/615,448
FILING DATE: 19-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: Dennis Manorte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
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Best Local
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REGISTRATION NUMBER: 30,623
REFERENCE/DOCKET NUMBER: FA-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-282-0700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Poblenz, Hans-Dieter
APPLICANT: Boidol, Werner
APPLICANT: Streber, Wolfgang
TITLE OF INVENTION: PROCESS FOR THE ISOLATION AND
TITLE OF INVENTION: CHARACTERISATION OF A GENE ENZYME SYSTEM FOR INACTIVATION
TITLE OF INVENTION: OF THE HERBICIDE PHENNEDIPHAN AND TRANSFER OF THE GENE
TITLE OF INVENTION: INTO PLANTS TO PRODUCE HERBICIDE-TOLERANT PLANTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 530 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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 15
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                                                                                                                                                                                     TOPOLOGY:
                         2 GGCVQDG 8
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GCCLEDG 21
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                                                               Conservative
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                                                                              75.0%;
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71.4%;
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                                                        Score 36; DB Pred. No. 2.7e-2; Mismatches
                                                                                                                                                                                                                                                                                                                                 FA-1623 DIV (951-87)
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                                                                        DB 1;
2.7e+02;
                                                          0
                                                                                     Length 493;
                                                      Indels
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RESULT 4
US-08-448-128-7
; Sequence 7, Application US/08448128
; Patent No. 5948670
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/446,934
CLASSIFICATION DATA:
CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/196,361
FILING DATE: 02-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/615,448
PILING DATE: 19-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/353,871
FILING DATE: 18-MAY-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DE P3817384.0
FILING DATE: 19-MAY-1988
ATTORNEY/AGENT INFORMATION:
NAME: MG-11PR- EAUGRAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 7,
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 493 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 24,735
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-382-0700
TELEPAX: 212-382-0888
TELEX: 23605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
ZIP: 1036-8403
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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TELEFAX: 236925
                                                                                                                  15 GGCLEDG
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CORRESPONDENCE ADDRESS:
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APPLICANT: Boidol, Werner
APPLICANT: Streber, Wolfd
                                                                                                                                                 2 GGCVQDG 8
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                                                                                                                                                                                     Conservative
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No. Avenue of the Americas
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TVENTION: PROCESS FOR THE ISOLATION AND
TVENTION: CHARACTERISATION OF A GENE ENZYME SYSTEM FOR INACTIVATION
TVENTION: OF THE HERBICIDE PHENMEDIPHAN AND TRANSFER OF THE GENE
TVENTION: INTO PLANTS TO PRODUCE HERBICIDE-TOLERANT PLANTS
                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                              protein
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71.4%;
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                                                                                                                                                                         Score 36; DB 4; Pred. No. 2.7e+02; Pred. No. 2.7e+02; O;
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                                                                                                                                                                                                              Length 493;
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RESULT 5
US-08-948-703-7
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                                                                                           Sequence 7, Application US/08948703 Patent No. 6060645
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Best Local 9
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                                                                            GENERAL INFORMATION:
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                           APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 493 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: 212-382-0700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 19-MAY-1988 ATTORNEY/AGENT INFORMATION:
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 TITLE OF INVENTION:
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                                                                                                                                                                                                                                                     Local Similarity hes 5; Conserv
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TELEPHONE: 214-1-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: DE P3817384.0 FILING DATE: 19-MAY-1988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
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                           Streber,
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                                               Boidol,
                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                   linear
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                                                            Pohlenz,
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71.4%;
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WOLFGANG
PROCESS FOR THE ISOLATION AND
CHARACTERISATION OF A GENE ENZYME SYSTEM FOR INACTIVATION
                                                              Hans-Dieter
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Pred. No.
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Query Match
Best Local Similarity
Them 5; Conserve
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; MOLECULE TYPE:

US-08-948-703-7
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                                                                                                                                                                       Sequence 1, Application US/08426125 Patent No. 5853973
                                                                                                                                                          GENERAL INFORMATION:
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                                                  APPLICANT: Kwagh, Ja
APPLICANT: Stockton,
TITLE OF INVENTION:
TITLE OF INVENTION:
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REFERENCE/DOCKET NUMBER: P/
TELECOMMUNICATION INFORMATION:
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OPERATING SYSTEM: PC-DO
SOFTWARE: PATENTIN Rela
CURRENT APPLICATION DATA:
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                                    NUMBER OF SEQUENCES:
                                                                                                                     APPLICANT: Kakefuda, Genichi
APPLICANT: Ott, Karl-Heinz
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CITY: New York
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1180 Avenue of the Americas
                                                                                  Stockton,
                                                                                                   Kwagh, Jae-Gyu
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SYSTEM: PC-DOS/MS-DOS
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Darby & Darby
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                                                  Structure-Based Designed Herbicide Resistant Products
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71.4%;
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                                                                                      Gerald W.
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Pred. No. 2.7e
2; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                   Length 493
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Query Match
Best Local Similarity 62.50,
Strokes 5; Conservative
   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,355
FILING DATE: 31-MAY-1995
CLASSIFICATION: 435
CLASSIFICATION: 435
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TELEEX: 236687
TELEX: 236687
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 599 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/08455355 Patent No. 5928937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
ORGANISM: Zea mays
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Darby & Darby
STREET: 805 Third Avenue
                                                                                                                                                                                                                                                                                                                                           APPLICANT: Kakefuda, Genici
APPLICANT: Ott, Karl-Heinz
APPLICANT: Kwagh, Jae-Gyu
APPLICANT: Stockton, Gerald
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                                                                                                                                                                                                            STREET: 805 Th
CITY: New York
STATE: New Yor
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                                                                                                                                                                       COUNTRY: USA
ZIP: 10022-7513
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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FILING DATE: 20-APR-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: RObinson, Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (212)-527-7783
TELEPHONE: (212)-753-6237
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REGISTRATION NUMBER: 33,448
REFERENCE/DOCKET NUMBER: 06
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                                                                                                                                                                                                          New York
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                                                                                                                                                                                                                                                                                                      Resistant Products
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                                                                                                                                                                                                                                                                                                                                           Gerald W.
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Pred. No. 6
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STRANDEDNESS:
TOPOLOGY: unki
MOLECULE TYPE: 1
US-08-321-356-2
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US-08-321-356-2
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Best Local Similarity
Thes 5; Conserve
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                                                                    INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 648 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Walcus Wyner, Lynn
REGISTRATION NUMBER: 34869
REFERENCE/DOCKET NUMBER: 1
                                                                                                                                                                                                                                              ZIP: 94304

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
ADDRIVATION DATA:
                                                                                                                                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 599 amino acids
TYPE: amino acid
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ADDRESSEE: SANDOZ A
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          236 GGGCARSG 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein HYPOTHETICAL: NO ORIGINAL SOURCE:
                                                      TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 06
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)-527-7783
                                                                                                                                                                                                                            APPLICATION NUMBER:
FILING DATE:
                                                                                                                           ELEPHONE:
                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                               CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGGCVQDG 8
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                                                              648 amino acids
                                                                                                                                                                                                                                                                                                                                                                 California
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                                                                                                                                                                                                                                                                                                                                                                                        E: SANDOZ AGRO INC.
975 California Avenue
                                                                                                             : (415)354-3588
(415)857-1125
                            unknown
                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                       Bernasconi, Paul
Moodworth, Alison R.
VENTION: GENE EXHIBITING RESISTANCE TO
VENTION: ACETOLACTATE SYNTHASE INHIBITOR HERBICIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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Pred. No.
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No. 6.1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (415)... TELEFAX: (415)... 4:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
**PMCTH: 648 amino acids
                                                                                                                                            Sequence 7, Application US/08469412A Patent No. 5856125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4, Applic Patent No. 5633437
                                                                             GENERAL INFORMATION:
APPLICANT: Mavrothalassitis
APPLICANT: Blair, Donald G.
APPLICANT: Fisher, Robert J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Marcus-Wyner, Lynn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPOTER: IBM PC COMPOTIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: (415)354-3588
TELEFAX: (415)857-1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: SANDOZ AGRO INC.
STREET: 975 Callfornia Avenue
                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                               APPLICANT:
                  TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: WOOdworth, Alison R.
TITLE OF INVENTION: GENE EXHIBITING RESISTANCE TO
TITLE OF INVENTION: ACETOLACTATE SYNTHASE INHIBITOR HERBICIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Bernasconi
APPLICANT: Woodworth,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      285 GGGCLNSG 292
                                                                                                                                                                                                                                            285 GGGCLNSG 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Marcus-Wyner, Lynn
REGISTRATION NUMBER: 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/321,356 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Palo Alto
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER:
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                                                                                                                                                                                                                                                                           1 GGGCVQDG 8
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Beal Jr., Gregory J.
Athanasiou, Meropi A.
Sgouras, Dionyssios N.
VENTION: The ERF Genetic Locus and Its Products
EQUENCES: 16
                                                                             Fisher, Robert J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              USA
                                                                                                           Mavrothalassitis,
                                                                                                                                                                                                                                                                                                           Conservative
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l; Mismatches 2;
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                                                                                                            George
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                                                                                                                                                                                                                                                                                                                                        Length 648;
                                                                                                                                                                                                                                                                                                         Indels
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"hes 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                     Sequence 7, Application US/09021715 Patent No. 6194547 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 01
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 7:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/0 FILING DATE: 05-JUN-1995 CLASSIFICATION: 435 ATTORNEY/AGENT INFORMATION: NAME: Garrett-Wackowski,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 1.543
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  490 GGGCLSGG 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: STRANDEDNESS: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Garrett-Wackowski, REGISTRATION NUMBER: 37,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE:
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                  Sgouras, Dionyssios N.
TITLE OF INVENTION: The ERF Genetic Locus and Its Products
NUMBER OF SEQUENCES: 16
                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Mavrothalassitis, George
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94111-3834
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                                                                                                                                               CITY: San Francisco
                                                                                                               COUNTRY: USA
                                                                                                                              STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               California
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                                                                                                                                                                                                                                                                                              Beal Jr., Gregory J.
                                                                                                                                                                                                                                                                                                                 Fisher, Robert
                                                                                                                                                                                                                                                                           Athanasiou, Meropi A
                                                                                                                                                                                                                                                                                                                                  Blair, Donald
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          68.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "murine ERF amino acid sequence
(first 8 amino acids from first exon no
included)"
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Pred. No. 7
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 Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 543;
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CURRENT APPLICATION DATA:

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COMPUTER TEADABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/143,365A
FILING DATE: 29-OCT-1993
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Hendricks, Glenna M
REGISTRATION NUMBER: 32,535
DEEPDERMOF/DOCKET NIMBER: 10-well-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; (first 8 amino acids from first exon not sequence; included) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
                                                                                   REFERENCE/DOCKET NUMBER: Lowell-2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 425-4250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEPHAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: Protein LOCATION: 1.543 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                              E: Hendricks and Assoc.
9669 A Main Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 543 amino acids
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Garrett-Wackowski, Eugenia
REGISTRATION NUMBER: 37,330
REFERENCE/DOCKET NUMBER: 015280-229000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/09/021,715 FILING DATE: 10-Feb-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                    IMMUNO-POTENTIATING SYSTEMS FOR PREPARATION OF IMMUNOGENIC MATER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    68.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 33; DB 4;
Pred. No. 7.7e+0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 543;
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US-08-143-365A-10
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Patent No. 5726292
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                            TELEFAX: (703) 425-2767
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/143,365A
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Best Local S
                                                                                                                                                                                         FRAGMENT TYPE:
                                                                                                                                                                                                          HYPOTHETICAL: NO
                                                                                                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                     NAME: Hendricks, Glenna M
REGISTRATION NUMBER: 32,535
REFERENCE/DOCKET NUMBER: LOWell-2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION: NAME: Hendricks, Glenna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: single
TOPOLOGY: unknown
MOLECULE TYPE: peptide.
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Hendricks and Assoc.
STREET: 9669 A Main Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: LOWELL, TITLE OF INVENTION:
                                                                    1 GGGCVQ 6
                                                                                                                                                                                                                                                                 LENGTH: 19 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 29-OCCCLASSIFICATION: 42
                                                                                                                                                                                                                                                                                                                                                           CELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Fairfax
                                       GGGCTQ 12
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                                                                                              Conservative
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                                                                                                                                                                                                                    .. peptide
                                                                                                                                                                                                                                                   unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lowell, George H
ENTION: IMMUNO-POTENTIATING SYSTEMS FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                             (703)
                                                                                                                                                                                        internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-OCT-1993
N: 424
                                                                                                                                                                                                                                                                single
                                                                                                              66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PREPARATION OF IMMUNOGENIC MATERIALS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    66.7%;
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                                                                                                             Score 32;
Pred. No.
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                                                                                           Mismatches
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Pred. No. 40;
                                                                                                                     DB 1; Length 19;
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Query Match Best Local Similarity ""+ ches 5; Conserve

Conservative

FEATURE:

MOLECULE TYPE: protein

490 GGCLSGG 497

1 GGGCVQDG 8

GENERAL INFORMATION:

lowell, George H

TITLE OF INVENTION: IMM TITLE OF INVENTION: PRE NUMBER OF SEQUENCES: 15 CORRESPONDENCE ADDRESS:

COUNTRY: UZIP: 22031

Su

STREET: ADDRESSEE:

Fairfax ٧A

TELEFAX: (703) 425-2767
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:

14 amino acids

US-08-318-157B-2

Sequence 2, Application US/08318157B Patent No. 5874540

GENERAL INFORMATION:

TITLE OF INVENTION: APPLICANT: HANSEN, APPLICANT: ARMOUR,

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; MOLECULE TYPE: protein US-08-318-1578-2
                                                                                                                                                                                                                                                                                                                                US-08-471-570-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/318/157B
FILING DATE: 05-OCT-1994
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: SAXE, BERNHARD D.
REGISTRATION NUMBER: 28,665
REFERENCE/DOCKET NUMBER: 18733/464
TELEPHONE: (202)672-5300
TELEPHONE: (202)672-5399
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 75.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                             Sequence 2, Application US/08471570 Patent No. 5750371
                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                      APPLICANT: SENUU, APPLICANT: SENUU, APPLICANT: WATANABE, Tatsuya APPLICANT: WATANABE, TROTEIN,
                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: DAVID G. CONLIN; DIKE, BRONSTEIN, ROBERTS &
ADDRESSEE: CUSHMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 119 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 5
                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 3000 K S. CITY: Washington STATE: D.C.
COMPUTER: IBM PC OPERATING SYSTEM:
                                                                                STATE: Massachusetts COUNTRY: US
                                                                                                               STREET: 130 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (202
TELEX: 904136
                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
ZIP: 20007-5109
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3000 K Street, N.W., Suite 500
                                                                                                                                130 Water Street
                                                                                                                                                                                                                                                                IGARASHI, Koichi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
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CDR-GRAFTED TYPE III ANTI-CEA HUMANIZED
MOUSE MONOCLONAL ANTIBODIES
PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              66.78;
75.08;
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Pred. No. 2.7e+02;
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Search completed: June 13, 2001, 14:27:06 Job time: 627 sec
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                                                                                                                                                           Query Match 66.7%;
Best Local Similarity 71.4%;
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
APPLICATION NUMBER: US 07/743369
FILING DATE: 16-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: LINEK, Ernest V
REGISTRATION NUMBER: 29822
REFERENCE/DOCKET NUMBER: 40897
                                                                                                                                                                                                                                                                                                                                      TELEFAX: (617)523-6440
TELEX: 200291 STRE UR
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)523-3400
TELEFAX: (617)523-6440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                         MOLECULE TYPE:
                                                                                         111 GACTQDG 117
                                                                                                                                                                                                                                                                                                               TYPE: a
                                                                                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/471,570 FILING DATE: 06-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                         2 GGCVQDG 8
                                                                                                                                                                                                                                                                                                         H: 201 amino acids
                                                                                                                                                                                                                                                                         protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/149,664
                                                                                                                                                               0; Mismatches
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Pred. No. 4.4e+02;
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Minimum
Maximum
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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A_Geneseq_0401:*

// SIDS6/gcgdata/geneseq/geneseqp/AA1980.DAT:*

// SIDS6/gcgdata/geneseq/geneseqp/AA1981.DAT:*

// SIDS6/gcgdata/geneseq/geneseqp/AA1983.DAT:*

// SIDS6/gcgdata/geneseq/geneseqp/AA1983.DAT:*

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// SIDS6/gcgdata/geneseq/geneseqp/AA1987.DAT:*

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// SIDS6/gcgdata/geneseq/geneseqp/AA1999.DAT:*

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length: 2000000000
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Gapop 10.0 , Gapext 0.5
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40	30	30	20	20	18	18	13	13	13	80	Query Match Length DB	
7			21	20	16	16	20	20	20	21	BB	
P61028	Y68811	R87049	Y79130	W94487	R82833	W73953	88098W	W86076	W86096	Y79127	ID	SUMMARIES
H-chain variable r	Human heavy chain	Human group III he	Human adult heart	Human adult heart	N-terminal of C179	IgG heavy chain fr	Peptide from human	Peptide from human	Peptide from human	Peptide antagonist	Description	RIES

	45	44	43	42	41	40	39	38	37	36	35	34	ω ω	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
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	Y56660	B40137	B40136	B40134	в40130 .	B40113	B40108	B40107	B40097	B40096	B40095	в40094	B40093	B40087	в40086	B40085	B40084	B40072	W59614	R72074	R54816	R52066	R34279	B40135	B40112	в40092	в40089 ·	Y64844	Y56646	Y11665	R92997	Y64925	Y64774 ·	R76969
,	tial pe	Anti-hIL12 antibod	Anti-hIL12 antibod	Anti-hIL12 antibod	Anti-hIL12 antibod	Anti-hIL12.antibod	Anti-hIL12 antibod	Anti-hIL12 antibod	2	2	-hIL12	N	Anti-hIL12 antibod	Anti-hIL12 antibod	Anti-hIL12 antibod	N		N	protei	on.	SpA-reactive VH re	μ.	Human TNF binding		hIL12	i-hIL12	-hIL12 ar	n 5′ ES	pept	Human 5' EST secre	Homologous sequenc	ש	' ES	

ALIGNMENTS

RESULT Y79127

Y79127;

Y79127 standard; Peptide; 8 AA.

05-JUN-2000 (first entry)
Peptide antagonist of zonulin.

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Zonulin; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antiulcer; antivral; antibacterial; cytostatic; anti-HIV; vulnerary; antiallergic; hypotensive; immunosuppressive; antiparasitic; vasotropic; gastrointestinal inflammation; therapy.

Synthetic.

W0200007609-A1.

17-FEB-2000.

28-JUL-1999; 99WO-US16683.

03-AUG-1998; 98US-0127815.

(UYMA-) UNIV MARYLAND BALTIMORE.
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New peptide antagonist of zonulin useful as antiinflammatory agent for

WPI; 2000-205565/18

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RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC (2), one of 25 such peptides (see Y79105-29) of the invention, CC (2), one of 25 such peptides (see Y79105-29) of the invention, CC which bind to a zonula occludens toxin (ZOT) receptor, yet do not CC (TJ). The peptide antagonists are based on a common mortif of ZOT cC and human zonulins, which is believed to be critical for receptor cC antiinflammatory agents in the treatment of gastrointestinal cC antiinflammatory agents in the treatment of gastrointestinal cC and yet does not physiologically modulate the opening of TJ in the CC caused by infection, e.g. Clostridium difficile infection, cc caused by infection, e.g. Clostridium difficile infection, cc caused by infection, e.g. clostridium difficile infection, cc collagenous colitis, inflammatory bowel disease, diseases with cc correction of congenital heart disease with Fortan's gastric cancer, cc correction of congenital heart disease with Fortan's disease, cc e.g. systemic lupus erythematosus or food allergies, primarily to cc milk.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 8
                                              14-APR-1998;
21-MAY-1997;
31-JUL-1997;
28-NOV-1997;
(BIOV-) BIOVATION LTD
                                                                                                                         21-MAY-1998;
                                                                                                                                                      26-NOV-1998
                                                                                                                                                                                  W09852976-A1
                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                      Peptide from humanised A33 heavy chain variable region.
                                                                                                                                                                                                                                                         Non-immunogenic;
                                                                                                                                                                                                                                                                                                                     03-MAR-1999
                                                                                                                                                                                                                                            immunoglobulin;
                                                                                                                                                                                                                                                                                                                                                     W86096;
                                                                                                                                                                                                                                                                                                                                                                      W86096 standard; peptide; 13 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            treating cerebral ischemia, stroke, cerebral edema, gastritis, shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ب
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         h 100.0%;
Similarity 100.0%;
8; Conservative 0;
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                         98GB-0007751.
97GB-0010480.
97GB-0016197.
97GB-0025270.
97US-0067235.
                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                   98WO-GB01473.
                                                                                                                                                                                                                               ; epitope; T-cell; immunogenicity;
therapeutic; streptokinase; diagno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             69pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                English
                                                                                                                                                                                                                         streptokinase; diagnosis; human; A33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 44; DB 21;
Pred. No. 3.2e+05;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                         immune system;
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Reducing immunogenicity sequence of the protein of a given species

of proteins - by modifying the amino acid to eliminate potential epitopes for T-cells

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W86076
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 8
                                                                                                    14 - APR-1998;
21-MAY-1997;
31-JUL-1997;
28-NOV-1997;
02-DEC-1997;
                                  WPI; 1999-045301/04.
                                                                           (BIOV-) BIOVATION LTD.
                                                                                                                                                                     21-MAY-1998;
                                                                                                                                                                                           26-NOV-1998
                                                                                                                                                                                                               W09852976-A1
                                                                                                                                                                                                                                          Non-immunogenic; epitope; T-cell; immunogenicity; immune system; immunoglobulin; therapeutic; streptokinase; diagnosis; human; A33
                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                         Peptide from
                                                                                                                                                                                                                                                                                                               03-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a method for the production of non-immunogenic proteins. The method comprises determining at least part of the amino acid sequence of the protein; (b) identifying in the amino acid sequence or more potential epitopes for T-cells (T-cell epitopes) of the given one of the T-cell epitopes for T-cells (T-cell epitopes) of the given come of the T-cell epitopes dentified in step (b) thereby to eliminate at least reduce the immunogenicity of the protein when exposed to the immune protein to predict the basis for immunogenic responses is also provided. The immunoglobulins or therapeutic proteins, e.g. Streptokinase. The products peptides from humanised A33 heavy chain variable region predicted by
                                                                                                                                                                                                                                                                                                                                                  W86076 standard; peptide; 13
                                                                                                                                                                                                                                                                                                                                      W86076;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Reducing immunogenicity of proteins - by modifying the amino acid sequence of the protein to eliminate potential epitopes for T-cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 5; Page 34; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 100.
les 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-045301/04.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13 AA;
                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                            humanised A33 heavy chain variable region.
                                                                                               98GB-0007751.
97GB-0010480.
97GB-0016197.
97GB-0025270.
97US-0067235.
                                                                                                                                                                 98WO-GB01473.
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Example

5; Page 33; 77pp; English

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Best Local S
Matches 8
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21-MAY-1997;
31-JUL-1997;
28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a method for the production of non-immunogenic proteins. The method comprises determining at least part of the amino acid sequence of the protein; (b) identifying in the amino acid sequence one or more potential epitopes for T-cells (T-cell epitopes) of the given species; and (c) modifying the amino acid sequence to eliminate at least one of the T-cell epitopes identified in step (b) thereby to eliminate or reduce the immunogenicity of the protein when exposed to the immunogenicity of the protein when exposed to the immunogenicity of the protein when exposed to the immunogenic responses is also provided. The methods can be used particularly for reduce the immunogenic responses is also provided. The methods can be used particularly for reduce the immunogenic responses is also provided. The methods can be used particularly for reduce the immunogenic responses is also provided. The products can be used for diagnosis and therapy. Sequences W86075-W86114 represent peptide theading.
The invention relates to a method for the production of non-immunogenic proteins. The method comprises determining at least part of the amino acid sequence of the protein; (b) identifying in the amino acid sequence one or more potential epitopes for T-cells (T-cell epitopes) of the give
                                                                                                    of a given
                                                                                                                  sequence
                                                                                                                              Reducing
                                                                                                                                                          WPI; 1999-045301/04
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                                                                                                                                                                                                                                                                                                                               21-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Non-immunogenic;
immunoglobulin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide from humanised A33 heavy chain variable region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W86088;
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8; Conservative
                                                                                                  immunogenicity of of the protein to en species
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97GB-0025270.
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                                                                                                                                                                                                                                                                                                                                                                                                                                              therapeutic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           epitope; T-cell; immunogenicity;
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                                                                     77pp;
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                                                                        English
                                                                                                                 proteins - by modifying the amino acid eliminate potential epitopes for T-cell
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                                                                                                                                                                                                                                                                                                                                                                                                                                              streptokinase; diagnosis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 44; DB Pred. No. 0.2;
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osis; human; A3
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RESULT
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Best Local :
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                        This sequence represents a fragment of the IgG heavy chain. This sequence was isolated using the biomedical device of the invention, which comprises: (a) a biocompatible support; and (b) conglutinin which is covalently bound to the support. The device can be used for removing immune complexes (IC) from a fluid. This can be used for treating a mammal or for evaluating the status of a mammal. It can be used for treating diseases such as serum sickness, chronic immune complex nephritis, bacterial infections, viral infections, parasitic diseases, autoimmune diseases or neoplastic diseases. The devices can also be used for purification of IC and to study immune pathogenesis and antigens associated with a disease state. The covalently immobilised conglutinin can capture IC with high capacity and specificity and allows elution under mild conditions. The devices are stable with no loss of IC binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          species; and (c) modifying the amino acid sequence to eliminate at least one of the T-cell epitopes identified in step (b) thereby to eliminate or reduce the immunogenicity of the protein when exposed to the immune system of the given species. A method of analysing a pre-existing protein to predict the basis for immunogenic responses is also provided. The methods can be used particularly for reducing the immunogenicity of immunoglobulins or therapeutic proteins, e.g. Streptokinase. The products can be used for diagnosis and therapy. Sequences W86075-W86114 represent peptides from humanised A33 heavy chain variable region predicted by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IgG heavy chain; immune complex removal; conglutinin; infection;
serum sickness; chronic immune complex nephritis; parasitic disease;
autoimmune disease; neoplastic disease; immune pathogenesis; therapy
                                                                                                                                                                                                                                                             Example 4; Fig 11; 58pp; English.
                                                                                                                                                                                                                                                                                               New biomedical device for binding immune complexes - conglutinin covalently bound to a solid phase material
                                                                                                                                                                                                                                                                                                                                                   WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-AUG-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                  (IMMU-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IgG heavy chain fragment, IgG
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8; Conserv
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Pred. No. 0.2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pathogenesis; therapy
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Sequence

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Query Match Best Local :

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Score 44; DB 1 Pred. No. 0.28;

DB 16;

Length 18;

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                                                                                                                                             R82833 and R82834 represent the N-terminal sequences of the heavy chain cand light chain of an anti-human influenza A type virus antibody. The antibody these sequences were obtained from was isolated from hybridoma CC C179. The antibody recognises the stem region of the haemaglutinin (HA) CC molecule of the H1N1 and H2N2 subtypes of human influenza A type virus, and shows neutralisation activity against these two subtypes. The CC variable heavy chain sequence (see T04159) and the variable light chain CC coding sequence (see T04160) are useful in the production of artificial antibodies and antigen-binding polypeptides. These artificial antibodies and antigen-binding polypeptides. These artificial antibodies are useful in the diagnosis and treatment of human and considered the influenza. As the antibodies recognise the stem region of the HA molecule, the influenza virus will be recognised even if the HA molecule changes. This provides an advantage over current vaccines, as the virus considered the stem region of the HA molecule changes. This provides an advantage over current vaccines, as the virus of the virus of the HA molecule changes.
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                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gene encoding variable region of anti-human influenza A type virus antibody - useful for prodn. of artificial antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              haemagglutinin; variable light chai complementarity determining region.
                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Page 24; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1995-338286/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (TAKI ) TAKARA SHUZO CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-MAR-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antibody; human;
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8 ggglvqpg 15
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ilarity 100.0%;
Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       influenza type A virus; H1N1; H2N2; H3N2; HA; diagnosis;
variable light chain; therapy; CDR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ikunoshin K, Takashi T,
                                                             0;
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                                                          Score 44; DB 16; Length 18; Pred. No. 0.28; Indels
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Query Match Best Local Matches

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Score 44; DB 2 Pred. No. 0.31; Mismatches

DB 20; 0

Length 20; Indels

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ID W9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   molecular weight of 47 kD, as determined by SDS-PAGE, which is recognised by both anti-tau polyclonal antibody and by anti-zonula occludens toxin (ZDT) polyclonal antibody, and is capable of reversibly opening mammalian tight junctions. Zonulin proteins function as physiological modulators of mammalian tight junctions. They can be used for enhancing the absorption of therapeutic agents across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa with a spents such as drugs, and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass1 mucosa and across tight junctions of intestinal and nass2 mucosa and across tight junctions of intestinal and nass2 mucosa and across tight junctions of intestinal and nass2 mucosa and across tight junctions in the intestinal and nass2 mucosa and across tight junctions in the intertion across tight junct
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New purified zonulin - which is capable of reversibly opening mammalian tight junctions, used for enhancing the delivery of agents across intestinal and masal mucosa and blood brain barrier
                                                                    peptide of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 2; Page 45; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-070123/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zonulin; mammalian tight junction; zonula occludens toxin; ZO Vibrio cholerae; vaccine; cholera toxin; polyclonal antibody; intestinal mucosa; nasal mucosa; blood brain barrier.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W94487;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYMA-) UNIV MARYLAND BALTIMORE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9852415-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human adult heart zonulin N-terminal peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W94487 standard; peptide; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-APR-1999 (first entry)
                                                                    zonulin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97US-0859931.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98WO-US07636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             on describes pure zonulin which has 47 kD, as determined by SDS-PAGE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  has
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                which
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RESULT
R87049
ID R8
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AC R8
XX
DT 25
DT 25
CH KW HI
KW HI
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Y79130
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence is that of the N-terminal region of adult human heart zonulin. The N-terminal sequences of human adult and foetal zonulins (see Y79130-36) were compared with Vibrio cholerae zonula occludens toxin (20T) to identify a common motif thought to be involved in receptor binding. Peptide antagonists (see Y79105-29) based on this motif are useful as antiinflammatory agents for treatment of gastrointestinal inflammation, and for treatment of conditions associated with breakdown of the blood-braintestinal inflammation.
                                 Humanised antibody; interleukin-5; IL-5; recombinant antibody; antibody engineering; monoclonal antibody; MAD; 39D10; CDR; complementarity determining region; heavy chain; framework;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New peptide antagonist of zonulin useful as antiinflammatory agent for treating cerebral ischemia, stroke, cerebral edema, gastritis, shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zonulin; antagonist; zonula occludens to human; blood-brain barrier; antiinflammu gastrointestinal inflammation; therapy.
                   eosinophilia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Y79130 standard; Peptide;
                                                                                                                 Human group III heavy chain framework 1.
                                                                                                                                                       25-JUN-1996
                                                                                                                                                                                            R87049;
                                                                                                                                                                                                                             R87049 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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|ggglvqpg 15
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8; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                100.0%; ilarity 100.0%; Conservative
                                                                                                                                                 (first entry)
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                   allergy; asthma
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                                                                                                                                                                                                                             Peptide;
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                                                                                                                                                                                                                                                                                                                                                                                                Score 44; DB 2
Pred. No. 0.31;
Mismatches
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Y68811
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Best Local Similarity 100.0%;
Matches 8; Conservative (
                                                                                                                                                                                                                                                                                                                                     Complementarity determining region; CDR; rat; immunoglobulin G; IgG; CD3 antigen complex; chimeric antibody; immunosuppression; heavy chain; CD3 antigen-T-cell receptor complex; graft rejection; cancer;
                 WPI; 2000-182655/16
                                                      Waldmann H,
                                                                                                                                                                                                            03-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                  Human heavy chain variable domain framework sequence without CDRs
                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Y68811 standard; Peptide; 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1996-058412/06
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                                                                                                                                 21-JUL-1998;
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                                                                                            (BTGI-) BTG
                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CLLT ) CELLTECH THERAPEUTICS
                                                                                                                                                                                                                                                                                                                        framework region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    into the human gp3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GGGLVQPG 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DS,
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                                                                                            INT LTD.
                                                      Frewin
                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                 98GB-0015909
                                                                                                                                                                      99WO-GB02380
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Framework regions (R87049-52) of human group III (gp3) germ line antibody heavy chain showed homology to corresponding regions (R87053-56, respectively) of the rat antibody. This homology monoclonal antibody 39D10 heavy chain (see R87039). This homolog was utilised in the prodn. of a humanised 39D10 VH (R87058) in which rat 39D10 VH complementarity determining regions were graff
                                                                                                                                                                                                                                                                                                                                                                                Anti-human IL-5 recombinant antibody reducing eosinophilia and for treating
                                                                                                                                                                                                                                                                                                                    4; 69pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94GB-0012230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95WO-GB01411
                                                                                                                                                 framework.
                                                                                                                                                                                                                                                                                                                    English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Emtage JS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LTD.
                    Score 44; I
Pred. No. 0
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                  useful for preventing or certain allergic diseases,
                                        DB: 17;
                    .46;
0
                                        Length 30;
  Indels
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Gaps
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RESULT
P61028
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Matches 8; Conserv
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                                                     Matches
                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequences without complementarity determining regions (CDRs). The sequences are used to produce the antibodies of the invention. The specification describes chimeric human/rodent anti-CD3 antibodies, which have a rodent anti-CD3 immunoglobulin G [195] light chain variable region and a human heavy chain variable region. The blockade of the CD3 antigen-T-cell receptor (TCR) complex. They can used for immunosuppression, particularly for the control of graft rejection. The antibodies can also enhance or re-direct T-cell responses to antigens. They can be used in the treatment of cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New humanized anti-CD3 antibodies, used for treating cancer or for immunosuppression and preventing graft rejection \,\cdot\,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                 Monoclonal:antibody obtd. from hybrid cells - used immune:assay of plasminogen activator tissue obtd. human embryo pulmonary cells w.r.t.
                                                                                                                                                                                                                                                                                                                                                                                                                                        MAb; anti-plasminogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  H-chain variable region of plasminogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-OCT-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P61028;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P61028 standard;
                                                                                                                                               Monoclonal antibodies raised to the plasminogen activator antigen may be used in isolation or detection of pure {\tt PA}.
                                                                                                                                                                                                                                                                          WPI; 1986-242924/37
                                                                                                                                                                                                                                                                                                   (ASAH ) ASAHI CHEMICAL
                                                                                                                                                                                                                                                                                                                                                         29-JAN-1985;
                                                                                                                                                                                                                                                                                                                                                                                    04-AUG-1986
                                                                                                                                                                                                                                                                                                                                                                                                              JP61172900-A
                                                                                                                      Sequence
                                                                                                                                                                                          Claim 1;
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8 ggglvqpg 15
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                                                   Local Similarity
nes 8; Conserv
 æ
                            GGGLVQPG 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
ggglvgpg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Page 47; 56pp; English.
                                                                                                                                                                                        Page 849; 9pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      represent human heavy chain variable domain
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                                                      Conservative
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                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                         activator; PA.
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Pred. No.
                                                      Score 44; DB 7
Pred. No. 0.61;
Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     activator antibody
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                                                                                DB 7; Length 40;
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                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 30
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RESULT 12
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   Y647
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Best Local S
Matches 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R76965-R76579 are the Fab fragment heavy chain variable domains of human anti-herpes monoclonal antibodies. These antibodies are capable of neutralising both herpes simplex virus (HSV) types I and II by binding an epitope present on glycoprotein D. The antibody may be used for detecting HSV in vivo or in vitro; for passive immunotherapy (pref. prophylactically) of HSV infection (eg. genital, oral or ocular herpes), partic. as its Fab fragment and as a competitive reagent for detecting neutralising anti-HSV antibodies in a sample. Anti-idiotypic antibodies raised against the mAb can be used for active immunotherapy of HSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diagnosis; neutralisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R76969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R76969 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-JAN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-JAN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Herpes simplex virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HSV-neutralising antibody clone Fab fragment heavy chain variable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human monoclonal antibodies that neutralise Herpes simplex virus (HSV) types 1 and 2 - used for diagnosis and passive immuno-therapy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Burioni R,
Human; 5' EST; expressed sequence tag; secreted protein; diagnosis; gene therapy; chromosome mapping; upstream regulatory sequence; forensic; location; development; protein synthesis; stability; regulation; identification.
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 4; Page 60; 100pp; English.
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                                                                                                               01-FEB-2000
                                                                                                                                                    Y64774;
                                                                                                                                                                                Y64774 standard; Protein;
                                                                                   Human 5' EST
                                                                                                                                                                                                                                                                1 GGGLVQPG 8
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4 ggglvqpg 11
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                                                                                                                                                                                                                                                                                                                                     l Similarity
8; Conserv
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                                                                                                                                                                                                                                                                                                                                      Conservative
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                                                                                   related
                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DR,
                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                                  polypeptide
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                                                                                                                                                                                       73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        immunotherapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      I; type II; monoclonal antibody;
                                                                                                                                                                                                                                                                                                                                        0;
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                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                        Score 44; DB 16;
Pred. No. 0.93;
Nismatches 0
                                                                                   SEQ ID NO:935.
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                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                        Length 62;
                                                                                                                                                                                                                                                                                                                                            Indels
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Query Match
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Thehes 8; Conserv
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Y64925
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                                                                                                                                                                                                                                                                                                                                                                                                                               CC 242265 to 243075 represent novel 5' expressed sequence tag (EST) CS sequences, corresponding to human secreted proteins. Y64651 to Y65438 CC represent the EST-related proteins corresponding to 242265 to 24352. CC The 5' ESTs can be used for producing secreted human gene products. CC and upstream regulatory regions which control the location, development CC stage, rate, and quantity of protein synthesis, as well as stability of CC mRNA. The ESTs are also useful as probes for chromosome mapping, and to CC procedures to identify individuals, or in diagnostic procedures to CC fine nucleic acids encoding signal peptides can be used for directing CC The nucleic acids encoding signal peptides can be used for directing CC polypeptide into a membrane, or importing a polypeptide into a cell. CC The proteins encoded by the EST sequences may be useful in treating a covariety of human conditions. Secreted proteins have therapeutic value, CC and the identification of new secreted proteins is valuable. Z42249 to CC 242264 and Y64644 to Y64650 represent sequences used in the
                                           gene therapy; chromosome mapping;
forensic; location; development; p
Homo sapiens
                             regulation;
                                                                                                       Human
                                                                                                                                    01-FEB-2000
                                                                                                                                                                                            Y64925 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel secreted protein 5' expressed diagnostic, forensic, gene therapy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      diagnostic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-038446/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dumas Milne Edwards J,
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28-APR-1998;
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                                          5' EST; expressed sequence tag; secreted protein; diagnosis;
herapy; chromosome mapping; upstream regulatory sequence;
ic; location; development; protein synthesis; stability;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  242388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page 638; 837pp; English
                                                                                                     EST related polypeptide SEQ ID NO:1086
                                                                                                                                                                                                                                                                                                                                                                                                          73
                             identification
                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                 Conservative
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98US-0069047.
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                                                                                                                                                                                                                                                                                                                                            Score 44; DB 21;
Pred. No. 1.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence tag sequences used in and chromosome mapping procedures
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Best Local S
Matches 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           stage, rate, and quantity of protein synthesis, as well as stability of mRNA. The ESTs are also useful as probes for chromosome mapping, and to obtain full length cDNA clones. The ESTs can also be used in forensic procedures to identify individuals, or in diagnostic procedures to identify individuals, or in diagnostic procedures to identify individuals having genetic diseases resulting from abnormal gene expression. The products may also be used in gene therapy protocols. The nucleic acids encoding signal peptides can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a membrane, or importing a polypeptide into a cell. The proteins encoded by the EST sequences may be useful in treating a variety of human conditions. Secreted proteins have therapeutic value, and the identification of new secreted proteins is valuable. Z42249 to 242244 and V46444 to Y64650 represent sequences used in the
                                                 protein
                                                            TOR-TI; monoclonal antibody; human; mouse; heavy chain; homology variable region; framework; cloning; computer; algorithm; immunogenicity; site-directed mutagenesis; T-lymphocyte epitope; tertiary structure; point mutation; antibody engineering;
                                                                                                                                                                                                                       R92997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The 5' ESTs can be used for producing secreted human gene products. They can be used to identify and isolate 5' untranslated regions (UTRs) and upstream regulatory regions which control the location, development stage, rate, and quantity of protein synthesis, as well as stability of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Z42265 to Z43075 represent novel 5' expressed sequence tag (EST) sequences, corresponding to human secreted proteins. Y64651 to Y65438 represent the EST-related proteins corresponding to Z42265 to Z43052.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel secreted protein 5' expressed sequence tag sequences used in diagnostic, forensic, gene therapy, and chromosome mapping procedures
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28-APR-1998;
                Homo sapiens
                                                                                                                                                   Homologous sequences to antibody IOR-T1 variable region heavy chain
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                                                                                                                                                                                                                                                         R92997 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-038446/03
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98US-0069047.
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                                                                                                                                                                                                                                                         Protein; 87
                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present invention.
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Pred. No. 1.2;
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                                                                                                                homology;
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Search completed: June 13, 2001, 14:25:44 Job time: 663 sec
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Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Identifying interspecies differences in amino acid sequence of Ig T-cell epitopes - by sequence comparison, also humanised antibodies contg. altered T-cell epitopes, retaining antigen specificity but not immunogenicity, esp. for tumour treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mateo de Acosta del Rio CM, Rodriguez RP, Valladares JL;
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                                                                                                                                                                                                                                                                                                                                                                                        Sequence
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8 ggglvqpg 15 .
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GenCore version Copyright (c) 1993 - 2000

4.5 Compugen Ltd

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      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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ALIGNMENTS	AVMS09	AVMS61	AVMSAB	S13690	S13693	S69911	PH1028	MHMS76	S24521	PL0255	S38488	PU0002	PU0003	S26926	S26925	S69896
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Ig heavy chain V regions (3-24 and 5-14) - mouse (fragment)
C; Species: Mus musculus (house mouse)
C; Apecies: Nus musculus (house mouse)
C; Accession: D31485
R; Bedzyk, W.D.; Johnson, L.S.; Riordan, G.S.; Voss Jr., E.W.
J Biol. Chem. 264, 1565-1569, 1989
A; Title: Comparison of variable region primary structures within an anti-fluorescein A; Reference number: A31485; MUID:89109167
A; Accession: D31485
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-36 < ABED>
C; Superfamily: immunoglobulin V region; immunoglobulin homology
C; Keywords: heterotetramer; immunoglobulin
A; Molecule type: mRNA
A; Residues: 1-30 <ANS>
A; Cross-references: EMBL:X73019
A; Cross-references: EMBL:X73019
C; Superfamily: lnmunoglobulin V region; immunoglobulin homology
C; Keywords: heterotetramer; immunoglobulin
F; 1-38/Domain: immunoglobulin homology (fragment) <IMM>
                                                                                                                                                                                A;Cross-references: EMBL:X73019
A;Experimental Source: Strain BALB/c
R;Ansell, K.H.
submitted to the EMBL Data Library, April 1993
A;Reference number: S36376
                                                                                                                                                                                                                                                                                                              Eur. J. Immunol. 23, 206-21, 1993
A;Title: Optimization of primers for cloning
A;Reference number: S33391; MUID:93122092
A;Accession: S33402
A;Molecule type: mRNA
A;Residues: 1-38 <KET>
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D31485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ig heavy chain V region - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 19-Mar-1997 #sequence_revision 24-Jul-1997 #text_change 17-Jul-1998
C;Accession: S33402; S36385
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       K.H.; Bendig, M.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.11;
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A;Molecule type: mRNA
A;Molecule type: mRNA
A;Molecules: 3-43 <KET>
A;Residues: 3-43 <KET>
A;Cross-references: EMBL:X73012
A;Experimental source: strain BALB/c
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;:14-59/Domain: immunoglobulin homology (fragment) <IMM>
                                                                                                                                                                                                                                        A; Molecule type: mRNA
A; Molecule type: mRNA
A; Residues: 1-59 cANS>
A; Cross-references: EMBL: X73012; NID: g295879; PIDN: CAA51498.1; PID: g939941
A; Cross-references: Education of paints, J.; Ansell, K.H.; Bendig, M.M.
Eur. J. Immunol. 23, 206-211, 1993
A; Title: Optimization of primers for cloning libraries of mouse immunoglobulin genes usi
A; Reference number: S33391; MUID: 93122092
A; Accession: S33396
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                                                                                                                                                                                                                                                                                                                                                                                                            submitted to the EMBL Data Library, April 1993
A:Reference number: S36376
A:Accession: S36381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ig heavy chain V region - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 19-Mar-1997 #sequence_revision 29-Aug-1997 #text_change 23-Jul-1999
C:Accession: S36381; S33396
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C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
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R:Currier, S.J.; Gallarda, J.L.; Knight, K.L.

J. Immunol. 140, 1651-1659, 1988

A:Title: Partial molecular genetic map of the rabbit V-H

A:Reference number: A27606; MUID:88154464

A:Accession: A27606
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                                 Query Match
Best Local Similarity
Matches 8; Conserv
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A; Residues: 1-59 <CUR>
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C;Species: 0ryvetolagus cuniculus (domestic rabbit)
C;Date: 08-Oryvetolagus cuniculus (domestic rabbit)
C;Date: 08-Oryvetolagus cuniculus (domestic rabbit)
C;Date: 08-Oryvetolagus cuniculus (domestic rabbit)
C;Accession: A27606
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""" by B; Conserv
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Best Local :
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1 GGGLVQPG 8
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8; Conserv
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Pred. No. 0.
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Pred. No. 0.18;
0; Mismatches 0
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Pred. No. 0.12;
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                                                 DB 2; Length 59; 0.18;
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Ig heavy chain precursor V-III region (Ab21) - human
C;Species: Homo saptens (man)
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 09-May-1997
C;Accession: C34964
R;Sanz, I; Casali, P; Thomas, J.W.; Notkins, A.L.; Capra, J.D.
J. Inmunol. 142, 4654-4061, 1989
A;Title: Nucleotide sequences of eight human natural autoantibody V-H regions reveals
A;Reference number: A92830; MUID:89235232
A;Accession: C34964
A;Molecule type: mRNA
A;Residues: 1-82 <SAN>
A;Note: the sequence shown differs from the authors' translation after residue 56
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Reywords: heterotetramer; immunoglobulin
Ig heavy chain V region (BFL1) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 16-Aug-1988 #sequence_revision 16-Aug-1988 #text_change
                                                                          RESULT
D25913
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""" by 8; Conserv
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A;Experimental source: strain BALB/c
C;Superfamily: immunoglobulin v region; immunoglobulin l
C;Keywords: heterotetramer; immunoglobulin
F;8-60/Domain: immunoglobulin homology (fragment) <IMM>
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A; Residues: 1-60 < ANS>
A; Cross-references: EMBL: X73011; NID: 9295878; PIDN: CAA51497.1; PID: 9939940
R; Kettleborough, C.A.; Saldanha, J.; Ansell, K.H.; Bendig, M.M.
Eur. J. Immunol. 23, 206-211, 1993
A; Title: Optimization of primers for cloning libraries of mouse immunoglobulin A; Reference number: S33391; MUID: 93122092
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A; Residues: 1-33 <KET>
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A;Reference number: S36376
A;Accession: S36382
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C;Species: Mus musculus (house mouse)
C;Date: 19-Mar-1997 #sequence_revision 29-Aug-1997 #text_change 23-Jul-1999
C;Accession: S36382; S33397
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Pred. No. 0.1
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RESULT
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R;Lawler, A.M.; Lin, P.S.; Gearhart, P.J.
Proc. Natl. Acad. Sci. U.S.A. 84, 2454-2458, 1987
A;Title: Adult B-cell repertoire is biased toward two
A;Reference number: A94148; MUID:87175692
A;Accession: D25913
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A;Residues: 1-94 <RES>
A;Cross-references: GB:S71357; NID:g550040
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Eur. J. Immunol. 24, 1657-1664, 1994
A;Title: Entry of B lymphocytes into the persistent cell
A;Reference number: 153392; MUID:94298870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Species: Mus sp. (mouse)
C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jan-2000
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A; Residues: 1-94 <LAW>
                              A; Gene:
                                              C; Genetics:
                                                             A;Cross-references: GB:S71351; NID:g550039
                                                                                                                                                                                                                                              CD33 antigen homolog - mouse (fragment)
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A;Status: preliminary; translated from GB/EMBL/DDBJ
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                 ;Gene: Ig VHX24a
;Superfamily: 1m
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nes 8; Conserv
family: immunoglobulin V region; immunoglobulin homology
/Domain: immunoglobulin homology <IMM>
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Pred. No. 0.29;
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A; Molecule type: DNA
A; Molecule type: DNA
A; Residues: 1-97 < MAN>
A; Residues: 1-97 < MAN>
A; Rote: a "G" was inserted at the position of between 72nd and 73rd of C; Comment: This antibody is produced by Epstein-Barr virus-transformed C; Superfamily: immunoglobulin V region; immunoglobulin homology C; Keywords: heterotetramer; immunoglobulin F; 14-97/Domain: immunoglobulin homology < IMM>
F; 14-97/Domain: dimmunoglobulin homology < IMM>
F; 30-35/Region: complementarity-determining 1
F; 49-66/Region: complementarity-determining 2
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C;Species: Homo sapiens (man)
C;Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 16-Aug-1996
C;Accession: PH0872
R;Manheimer-Lory, A.; Katz, J.B.; Pillinger, M.; Ghossein, C.; Smith, A.; Diamond, B.
J. Exp. Med. 174, 1639-1652, 1991
A;Title: Molecular characteristics of antibodies bearing an anti-DNA-associated idiot A;Reference number: PH0862; MUID:92078875
A;Accession: PH0872
                                                                                     A;Molecule type: DNA
A;Residues: 1-5,'0',7-12,'H',14-97 <TOM2>
A;Cross-references: EMBL:212344; NID:g32908; PIDN:CAA78214.1; PID:g32909
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;15-97/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                        R:Tomlinson, I.M.; Walter, G.; Marks, J.D.; Llewelyn, J. Mol. Biol. 227, 776-798, 1992
A;Title: The repertoire of human germline V(H) sequence A;Reference number: $26885; MUID:93021117
A;Accession: $26885
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ig heavy chain V region (DP-44) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 07-Apr-1994 #sequence_revision 07-Apr-1994 #text_change 23-Jul-1999
C;Accession: S26885; S36596
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A; Residues: 1-97 <TOM1>
A; Cross-references: EMBI
R; Tomlinson, M.
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Ig heavy chain V region (YAC-5) - human (C;Species: Homo sapiens (man) C;Species: Homo sapiens (man) C;ate: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change C;Accession: $46462 F;Cook, G.P.; Tomlinson, I.M.; Walter, G.; Riethman, H.; Carter, Nature Genet. 7, 162-168, 1994 A;Title: A map of the human immunoglobulin V(H) locus completed A;Reference number: $46460; MUID:95004581
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A; Accession: .S46462
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R;Tomlinson, I.M.; Walter, G.; Marks, J.D.; Llewelyn, M.B.; Winter, G.
J. Mol. Biol. 227, 776-798, 1992
A;Title: The repertoire of human germline V(H) sequences reveals about fifty groups of A;Reference number: S26885; MUID:93021117
A;Accession: S26890
A;Status; preliminary
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A; Residues: 1-97 < TOM>
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C;Species: Homo sapiens (man)
C;Date: 22-NoV-1993 #sequence_revision 10-NoV-1995 #text_change 23-Jul-1999
C;Accession: S26890
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A:Residues: 1-97 <TOM>
A;Residues: 1-97 <TOM>
A;Cross references: EMBL:Z12345; NID:g32910; PIDN:CAA78215.1; PID:g32911
C:Superfamily: immunoglobulin V region; immunoglobulin homology
C:Keywords: heterotetramer; immunoglobulin
E;15-97/Domain: immunoglobulin homology <IMM>
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G;Accession: S26895

A;Totalinson, I.M.; Walter, G.; Marks, J.D.; Llewelyn, M.B.; Winter, G. J. Mol. Biol. 227, 776-798, 1992

A;Title: The repertoire of human germline V(H) sequences reveals about fifty groups A;Reference number: S26885; MUID:93021117

A;Accession: S26895
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C:Species: Homo sapiens (man)
C:Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 23-Jul-1999
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A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-97 <COO>
A;Cross references: EMBL:227504; NID:g505430; PIDN:CAAB1824.1; PID:g505431
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;15-97/Domain: immunoglobulin homology <IMM>
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P SEQUENCE FROM N.A.

P SEQUENCE FROM N.A.

X MEDLINE-81013937; PubMed-6251474;

XA Bernard O., Gough N.M.;

RT "Nucleotide sequence of immunoglobulin heavy chain joining segment between translocated VH and mu constant regions genes.";

RL Proc. Natl. Acad. Sci. U.S.A. 77:3630-3634(1980).

CC -:- MISCELLANEOUS: THE SEQUENCE OF THE FIRST 197 RESIDUES OF THE CC REGION WAS ALSO DETERMINED & DIFFERS IN ONLY 3 POSITIONS FROM CORRESPONDING PORTION OF THE MOUSE MOPC 104E MU CHAIN.
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Pfam; PF00047; 1g; 1
Immunoglobulin V region
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NON_TER 111 111
SEQUENCE 111 AA; 12304
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                                                   Mus musculus (Mouse).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Musculus (1)
SEQUENCE.
MEDLINE-78158406; PubMed-417344;
Vrana M., Rudikoff S., Potter M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
NCBI_TaxID=10090;
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21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
1G HEAVY CHAIN V-III REGION HPC76 (FRAGMENT).
Mus musculus (Mouse).
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3 GGGLVQPG 10
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Best Local Similarity 100.0%;
Matches 8; Conservative 0
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Mis musculus (Mouse).
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Pfam: PF00047; 19; 1.
Immunoglobulin V region.
PTSULFID 22 98
                     Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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SEQUENCE
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Pfam; PP00047; 1g; 1.
Immunoglobulin V region.
DISULFID 22 98
NON_TER 113 113
SEQUENCE 113 AA; 12675 M
                                                                                                                                                                                                                                                                                                                                                                                  "Sequence variation among hear proteins.";
Proc. Natl. Acad. Sci. U.S.A.
-!- MISCELLANEOUS: THIS CHAIN
BINDS INULIN.
                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIJUE-78158406; PubMed=417344;
Vrana M., Rudikoff S., Potter M.;
"Sequence_variation among heavy chains from inulin-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HV28_MOUSE STANDARD; PRT; 113 AA. p01797; 21-JUL-1986 (Rel. 01, Created) 21-JUL-1986 (Rel. 01, Last sequence update) 15-JUL-1999 (Rel. 38, Last annotation update) 1G HEAVY CHAIN V-III REGION U61.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammaila; Eutheria; Rodentla; Sciurognathi; Muridae; Murinae; Mus
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PIR; A93818; AVMSAP
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S CHAIN WAS ISOLATED FROM A MYELOMA PROTEIN
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thi; Muridae; Murinae; Mus
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HV30_MOUSE
STANDARD; PRT; 113
P01799;
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence upda
15-JUL-1999 (Rel. 38, Last annotation up
IG HEAVY CHAIN V-III REGION ABE-47N.
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PIR; C93818; AVM50-

InterPro; IPR003006; -

Pfam; PF00047; 1g; 1

Immunoglobulin V region.

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NA; 12647 MW; F
HV31_MOUSE STANDARD; F
P01800;
21-JUL-1986 (Rel. 01, Created)
01-OCT-1993 (Rel. 27, Last sequ
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Pfam; PF00047; 19; 1
Immunoglobulin V region.
DISULFID 22 98
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SEQUENCE 113 AA; 12675
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-!- MISCELLANEOUS: THIS CHAIN WAS
BINDS INULIN.
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Vrana M., Rudikoff S., Potter M.;
"Heavy-chain variable-region sequence
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Eukaryota; Metazoa; C
Mammalia; Eutheria; R
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Vrana M., Rudikoff S., Potter M.;
"Sequence variation among heavy chains proteins.";
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15-JUL-1999 (Rel. 38, Last annotation update)
IG HEAVY CHAIN V-III REGION T957.

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Immunoglobulin V region.
TSULFID 22 98
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NA; 12691 MV
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Eukaryota; Metazoa; Cl
Mammalia; Eutheria; Ro
NCBI_TaxID=10090;
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P01803;

21-JUL-1986 (Rel. 01, Created)

21-JUL-1986 (Rel. 01, Last sequence up

15-JUL-1999 (Rel. 38, Last annotation

IG HEAVY CHAIN V REGION AMPC1.
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Immunoglobulin heavy chains from anti-inulin myeloma evidence for a new heavy chain joining segment.";
J. Immunol. 127:191-194(1981).
-I- MISCELLANEOUS: THIS CHAIN WAS ISOLATED FROM A MYEL
                                                                                                                                                                                  MEDLINE-81216632: PubMed-6787122;
RudikOff S., Potter M.;
"Immunoglobulin heavy chains from anti-inulin myeloma evidence for a new heavy chain joining segment.";
J. Immunol. 127:191-194(1981).
-I- MISCELLANEOUS: THIS CHAIN WAS ISOLATED FROM A MYEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammaila; Eutheria; Rodentia;
NCBI_TaxID=10090;
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"Immunoglobulin heavy chains
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InterPro; IPR003006; -.
Pfam; PF00047; 1g; 1.
Immunoglobulin V region.
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Immunoglobulin V region.
DISULFID 22 98
NON_TER 115 115
SEQUENCE 115 AA; 12887
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21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
IG HEAVY CHAIN V-III REGION W3082.
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HV32_MOUSE
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21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
                                                                                                                                               binding proteins.";
J. Immunol. 128:302-307(1982)
                                                                                                                                                                  MEDLINE-82099361; PubMed-6798111;
Johnson N., Slankard J., Paul L.,
"The complete V domain amino acid
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Mammalia; Eutheria;
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Mammalia; Eutheria;
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Sciurognathi; Muridae;
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                          modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                                                                                                                                            MEDITINE-82059449, PubMed=6795591;
Ollo R., Auffray C., Sikorav J.-L., F
"Mouse heavy chain variable regions:
germ-line VH gene segment.";
Nucleic Acids Res. 9:4099-4109(1981).
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21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence up:
15-JUL-1999 (Rel. 38, Last annotation
IG HEAVY CHAIN V REGION 441 PRECURSOR.
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P01765;
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J. Biol. Chem. 252:7192-7199(1977).
-i- MISCELLANEOUS: THE SEQUENCES OF THE V REGIONS OF THE HEAVY CHAINS OF IGM AND IGG2 ISOLATED FROM A SINGLE PATIENT WITH BICLONAL GAMMOPATHY ARE IDENTICAL. THEIR LIGHT CHAINS ARE APPARENTLY ALSO
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HEAVY CHAIN V-III REGION TIL.
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P01786;
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21-JUL-1986 (Rel. 01, Last sequence upda 15-JUL-1999 (Rel. 38, Last annotation up 15-JUL-1990 (Rel. 38, Last annotation up 15-
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Pfam; PF00047; 1g; 1.
Immunoglobulin V region.
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SEQUENCE 116 AA; 12431
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1 18
                  NCBI_TaxID=10090;
                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
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SEQUENCE
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PIR; A02062; AlHUTU.
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Proc. Natl. Acad. Sci. U.S.A.
-1- MISCELLANEOUS: THIS CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Variable region sequences of five human immunoglobulin of the VH3 subgroup: definitive identification of four h
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Mammalia; Eutheria;
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15-JUL-1999 (Rel. 38, Last annote
IG HEAVY CHAIN V-III REGION TUR.
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J.M.;
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CHAIN WAS ISOLATED FRO
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MEDIJINE-81101090; PubMed-6450418;
Matthyssens G., Rabbitts T.H.;
"Structure and multiplicity of genes for the human immunoglobulin heavy chain variable region.";
Proc. Natl. Acad. Sci. U.S.A. 77:6561-6565(1980).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HV3C_HUMAN STANDARD; PRT; 117 AA. P01764; P01764; 21-JUL-1986 (Rel. 01, Created) 21-JUL-1986 (Rel. 01, Last sequence update) 15-JUL-1999 (Rel. 38, Last annotation update) 15-JUL-1999 (Rel. 38, Last annotation update) 15-JUL-1999 (Rel. 38, Last annotation update) 16 HEAVY CHAIN V-III REGION VH26 PRECURSOR.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                           Pfam; PF00047; ig; 1.
Immunoglobulin V region; Signal.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the SWISS Institute of Bioinformatics and the EMBL outstation
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HSSP; P01789; 2MCP
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J. Biol. Chem. 254:11418-11430(1979),
-1- MISCELLANEOUS: THIS ALPHA CHAIN WAS ISOLATED FROM A MYELOMA PROTEIN THAT CONTAINS ONE LIGHT AND ONE HEAVY CHAIN PER MOLECULE,
LINKED BY A DISULFIDE BOND. IN CONTRAST, NORMAL MOUSE IGA MOLECULES CONTAIN TWO LIGHT AND TWO HEAVY CHAINS AND LACK A
LIGHT-HEAVY CHAIN DISULFIDE BOND.
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Search completed: June 13, Job time: 526 sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Capra J.D., Kehoe J.M.; "Variable region sequences of five human immunoglobulin heavy chains of the VH3 subgroup: definitive identification of four heavy chain
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Pfam; PF00047; ig; 1.
Immunoglobulin V region.
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PIR; A02059; G1HUWS.
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Q9ul91 homo sapien
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Q9rl44 mus musculu
Q9rl47 drosophila
Q9vzk7 drosophila
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Q9xzy2 leishmania
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Q9xxy2 burkholderi
Q9x640 burkholderi
Q9x640 burkholderi
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09z3a8 b 068143 h 09ue173 h 09ue53 h 09u53 h 09pjt5 c 09jq12 c 09jq12 c 09r9b1 b 09rw41 b 09wwt1 b 09wwt1 b 09s639 b 09s638 b 09s638 b 09s638 b 09s7921 h 09np12 h 09np12 h 09np12 h 09np12 h 09np13 h 09np13 h 09np13 h 09np13 h	2	4	4	4	4	4	4	N	2	N	N	N	ν	თ	N	2	σ	13	4	N	N	ςı	4	4	N	N
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ALIGNMENTS

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Q9ULB6
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Best Local Similarity
Matches 8; Conser
                                                                     Q9ULB6 PRELIMINARY; PRT; 95 AA.

Q9ULB6;

01-MAY-2000 (TrEMBLrel. 13, Created)

01-MAY-2000 (TrEMBLrel. 13, Last sequence update)

01-OCT-2000 (TrEMBLrel. 15, Last annotation update)

IMUNOGLOBULIN HEAVY CHAIN (FRAGMENT).
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01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
PROLACTIN-BINDING PROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cohen H., Cohen O., Gagnon J.;
"Serum prolactin-binding protein (PRL-BP) of human and identified as IgG.";
C. R. Acad. Sci., III, Sci. Vie 317:293-298(1994).
HSSP; P01789; 1MCP.
SEQUENCE 15 AA; 1469 MW; 35ED2512FF3FA369 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rattus sp.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBL_TaxID=10118;
Homo sapiens (Human).
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01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation updat
MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIAB
   Eukaryota;
            Homo sapiens
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                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLINE-98277139; PubMed-9614934;
MU X., Liu B., Van der Merwe P.L.,
                                                                                                                                                                                                                                                                                                                                                                               01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIABLE
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Mammalia; Eutheria; Primates; Catarrhini;
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                                                                                                                                                                                                           SEQUENCE
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                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tange Y., Kayano H.;
"Human VH gene sequence.";
Submitted (NOV-1999) to the
EMBL; AB035268; BAA87067.1;
HSSP; P01772; 2FB4.
                                                                                                                                                                                                                                                                                                Young D.C
                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (Human).
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Mammalia; F
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118 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nilarity 100.
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Metazoa;
                                                                    PRELIMINARY;
                                                                                                                                                           Conservative
          (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
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; 12843 MW;
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10527 MW;
Chordata;
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Primates;
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Craniata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 44; DB
Pred. No. 0.6
% Mismatches
                                                                                                                                                                   Score 44;
Pred. No.
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                                                                                                                                                                                                        D0633949F2AC149D
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                  Otation update)
CHAIN VARIABLE
                                                                  118
                                                                                                                                                                                                                                                                                                                                                                                                                                  118
Vertebrata;
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                                                                                                                                                                                                                                                                                                                                                               Vertebrata;
                                                                  AA
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1.68;
                                                                                                                                                                           DB 4;
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                                                                                                                                                                  . 86;
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Euteleostomi;
                  REGION (FRAGMENT)
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Homo.
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Best Local
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Q9UL93;
Q1-MAY-2000 (TrEMBLrel. 13,
Q1-MAY-2000 (TrEMBLrel. 13,
Q1-JUN-2000 (TrEMBLrel. 14,
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Q9UL90;
01-MAY-2000
01-MAY-2000
01-JUN-2000
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NON_TER
SEQUENCE
                           MYOSIN-REACTIVE
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Mammalia; Eutheria;
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation updat
MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIAB
                                                                                                                                                                                                                                                                                                                                                                                                                       PFAM; PF00047;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Myosin-reactive autoantibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=9606;
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Young D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                          INTERPRO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              fetus.
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EMBL; AF035042; AAD56278.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=98277139; PubMed=9614934; Wu X., Liu B., Van der Merwe P.L.,
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Liu B., Van der Merwe P.L.,
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8; Conserv
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113 /
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12437
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Primates;
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87.5%;
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3, Last sequence update)
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7777 TN HEAVY CHAIN VARIABLE R
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Pred.
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?.9;
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0.86;
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                        REGION
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                    (FRAGMENT).
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Q9UL84;
01-MAY-2000
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Q9UL71;
Q1-MAY-2000
Q1-MAY-2000
Q1-OCT-2000
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SEQUENCE
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SEQUENCE FROM N.A.
MEDLINE=98277139; PubMed=9614934;
MEDLINE=98277139; Van der Merwe P.L.,
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Eukaryota; Metazoa; C
Mammalia; Eutheria; F
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-CT-2000 (TrEMBLrel. 15, Last sequence update)
MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIABLE
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MEDLINE-98277139; PubMed-9614934;
MEDLINE-98277139; PubMed-9614934;
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Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                                                                                                                                  INTERPRO;
                                                                                                                                                                                                                                                         Wu X., Liu B., Van
Young D.C.;
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                                                                                                                                                                                                                                        fetus."
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nes 7; Conserv
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7 GGGVVQPG 14
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                                                                           GGGVVQPG
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PRO; IPR003006; -.
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                                                                                                               7; Conservative
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116 AA;
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121 AA;
(TrEMBLrel. 13, (TrEMBLrel. 13,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                            PRELIMINARY;
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                                                                                                                                                            121
13154 MW;
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Primates;
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Primates;
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87.5%;
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                                                                                                                                 Score 41;
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                            PRT;
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RESULT
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Matches 7
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01-NOV-1999
01-OCT-2000
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SEQUENCE FROM N.A.
MEDLINE-98277139; PubMed-9614934;
MEDLINE-98277139; Van der Merwe P.L.,
                                                                                                                                              myeloma using PCR with patient-specific immuno Leukemia 9:1948-1953(195).
EMBL: S80860; AAD14339.1; -
HSSP: P01772; 2FB4.
INTERPRO: IPRO03006; -
PFAM; PF00047; id 1
                                                                                                                             NON_TER
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SEQUENCE
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Homo sapiens (Human).
Thervota; Metazoa; Chordata;
Thervota; Primates;
                                                                                                                                                                                                SEQUENCE FROM N.A.
MEDLINE-96071149; PubMed-7475288;
Cao J. Vescio R.A., Rettig M.B., Hon
Lichtenstein A.K., Berenson J.R.;
TA CD10-positive subset of malignant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=9606;
Q9S2V7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-OCT-2000 (TrembLrel. 15, Last annotation update) MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIABLE
                                                                                                                                         PEAM; PF00047; ig;
                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                         VH3 PROTEIN
                                                                                                                                                                                                                                                                                                                                                     Q9Y509
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                                                                                                                                                                                                                                                                                      Homo sapiens (Human)
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                                                                                 Similarity 7; Conserv
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122 AA;
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PRELIMINARY;
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13579 MW;
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Last sequence update)
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                                                                                        Score
Pred.
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                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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PRT;
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168
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CRC64;
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Best Local S
Matches 7
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SEQUENCE
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                                                                                                                                                                         NON_TER
                                                                                                                                                                                            PFAM; PF00047;
                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLLNE=98277139; PubMed=9614934;
MU X., Liu B., Van der Merwe P.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAY 2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIABLE
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Saunders D.C.,
Submitted (AUG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutharia; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-A3(2);
Redenbach M., Kieser H.M., Denapaite D., Eichner A., (Kinashi H., Hopwood D.A.;
"A set of ordered cosmids and a detailed genetic and the 8 Mb Streptomyces coelicolor A3(2) chromosome.";
Mol. Microbiol. 21:77-96(1996).
EMBL; AL109663; CAB52008.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q9S2V7;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
HYPOTHETICAL 17.2 KDA PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9606;
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                                                                                                                                                                                                                                                                                                     Myosin-reactive autoantibodies
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        James K.D., Parkhill Submitted (AUG-1999)
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STRAIN=A3(2);
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                Similarity
7; Conserv
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131 /
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(AUG-1999)
                Conservative
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87.5%;
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      Score 40; DB 4
Pred. No. 5.1;
1; Mismatches
                                                                                                                                                                                                                                                 87:184-192(1998)
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Q9R1A4;
01-MAY-2000
01-MAY-2000
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single chain antibody (ScFV)."
Submitted (MAY-1999) to the EM
EMBL; AF152372; AAD40243.1; -.
HSSP; P01842; 7FAB.
INTERPRO; IPR003006; -.
PFAM; PF00047; 1g; 4.
                                                                                                                      Wilde K.G., Yu X., Ekramoddoullah A.K.M., "Cloning of cDNAs encoding for anti-white antibody (Mab 7, its light and heavy chair
                                                                                                                                                                                                                                                   01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last seque
01-OCT-2000 (TrEMBLrel. 15, Last annot
GAMMA1 HEAVY CHAIN OF MAB7 (FRAGMENT).
Mus musculus (Mouse).
                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                        NCBI_TaxID=10090;
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Shinohara N., Demura
Submitted (DEC-1999)
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SEQUENCE 298
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HSSP; P01607; IREI.

INTERPRO; IPR003006; -.

PFAM; PF00047: i-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 shinohara N., Demura T., Fukuda H.;
shinohara N., Demura T., Fukuda H.;
"Isolation of a novel type of vascular cell wall-specific monoclonal
antibody recognizing a cell polarity using a phage display subtracti-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               [1]
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
TISSUE-SPLEEN;
Semura T., Fukuda
T., Fukuda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATOR (Tremblrel 13, 01-MAY-2000 (Tremblrel 13, 01-MAY-2000 (Tremblrel 13, 01-OCT-2000 (Tremblrel 15,
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Eukaryota; Metazoa; C
Mammalia; Eutheria; R
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                47 GGGLVKPG 54
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PS00290; IG_MHC; UNKNOWN_1
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298 AA; 31867 MW;
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Rodentia;
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to the
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Last annotation updat
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Pred. No.
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Sciurognathi; Muridae;
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Sciurognathi; Muridae; Murinae; Mus
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-white pine bl
y chains) and .
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                                                                       RA Addms M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D., Addms M.D., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F., RA Ammantides P.G., Scherer S.E., Holt R.A., M., Henderson S.N., Galle R.F., RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N., RA Barandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Ffeiffer B.D., RA Abril J.F., Agbayani A., An H.-J., Andrews-Ffannkoch C., Baldwin D., RA Ballew R.M., Basu A., Baxendale J., Bayzaktaroglu L., Beasley E.M., RA Becson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S., RA Berkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P., Ra Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P., Ra Borkova D., Botchen A., Deng Z., Mays A.D., Dew I., Dietz S.M., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M., Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P., RA Glodek A., Gong F., Gorrell J.H., Gu Z., Glabart W.M., Glasser K., RA Harris N.L., Harvey D., Heiman T.J., Hennandez J.R., Houck J., Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A., Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A., Martis N., Mobarry C., Morris J., Moshrefi A., Meunt S.M., Moy M., Murphy B., Murphy L., Murphy L., Murphy L., Murphy L., Murphy L., Nelson D.L., Raft C., Standers R.D., C., Scheeler F., Spradling A.C., Standers R.D., C., Scheeler F., Shen H., Shue B.C., Sunder S.D., Neather F., Saveri J.S., Pan S., Pollard J., Puri Y., Reese M.G., RA Mengler E., Spradling A.C., Stapleton M., Skupski M.P., Smith T., Ranger G.W., Weinschlam N., Zhang S., Yao Q.A., Mang X., Weinschlam S.M., Weasarman D.A., Weinstock G.M., Weissenbach J., Wang S., Then M., Zhang S., Zhao Q., Zheng L., Kapen G.W., Sunders R., Zhao Q., Zheng L., Kapen S., Andrew S., Zhao Q., Zheng L., Zheng L., Zhan M., Zhang G., Zhao Q., Zheng L., Kapen H., Shen H., Shen R.A., Shen M., Zhang G., Zhao Q., Zheng L., Zheng L., Zhan M., Zhang S., Zhao Q., Zheng L., Zheng L., Zhan M., Zhang S., Zhao Q., Zheng L., Zhan M., Zhang S., 
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SEQUENCE
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Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
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                                FLYBASE;
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AE003479; AAF47814.1;
SE; FBgn0035477; CG149
VCE 731 AA; 80099 M
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   D346AFC51B7F0CE1 CRC64;
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Search completed: June 13, Job time: 543 sec

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"Flagellin gene variation between clinical and environmental
of Burkholderia pseudomallel contrasts with the invariance an
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
STRAIN-E956;
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Bacteria; Proteobacteria; beta subdivision; Burkholderia group;
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                                                                                                                                                                                                                                                                                                                                                           clinical
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GGGLVQTG
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d. Microbiol. 47:689-694(1998).
AF030241; AAC27443.1; -.
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    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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1.953 Million cell updates/sec
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Copyright (c) 1993 - 2000 Comp
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US-08-471-780C-119
US-08-471-780C-119
US-08-466-710C-119
US-08-467-728ZB-119
US-08-467-75-82B-119
US-08-468-739C-119
US-08-129-930B-75
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            Sequence 66, Appl
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Sequence 119, Appl
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; TOPOLOGY: 1. ; MOLECULE TYPE: US-08-331-398A-66
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US-08-211-202-133	US-08-211-202-134	US-08-545-809A-129	US-08-211-202-117	PCT-US93-10555-3	US-08-428-197-3	US-07-942-245-21	US-07-942-245-17	PCT-US93-10555-4	US-08-428-197-4	PCT-US93-10555-48	US-08-665-202-31	US-08-428-197-48	US-07-942-245-37	US-08-211-202-116	US-08-765-783A-105	US-08-497-312-21	US-08-053-451B-126
Sequence 133, App	•	Sequence 129, App	Sequence 117, App	Sequence 3, Appli	Sequence 3, Appli	Sequence 21, Appl	Sequence 17, Appl	Sequence 4, Appli	Sequence 4, Appli		Sequence 31, Appl	Sequence 48, Appl	Sequence 37, Appl	Sequence 116, App		Sequence 21, Appl	Sequence 126, App

ALIGNMENTS

US-08-331-398A-66 ; Sequence 66 ; Patent No. ; GENERAL IN SOFTWARE: Patentin Release #1.0, VGURRENT APPLICATION DATA: APPLICATION UMBER: US/08/331,398A FILING DATE: 28-OCT-1994 CLASSIFICATION: 435 PRIOR APPLICATION DATA: ADDITION UMBER: US 07/767 331 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS ADDRESSEE: Townsend APPLICANT: Pai, Lee TITLE OF INVENTION: Single Chain B3 Antibody Fusion Proteins TITLE OF INVENTION: and Their Uses (as amended) NUMBER OF SEQUENCES: 68 APPLICANT: Pastan, Ira APPLICANT: Willingham, Mark APPLICANT: FitzGerald, David APPLICANT: Brinkmann, Ulrich STREET: One Market I CITY: San Francisco STATE: California COUNTRY: 66, INFORMATION: RY: USA 94105-1492 5608039 Application US/08331398A E: Townsend and Townsend and Crew One Market Plaza, Steuart Street Plaza Release #1.0, Version #1.30

TELEPHONE: (415) 543-9600
TELEFAX: (415) 543-5043
INFORMATION FOR SEQ ID NO: 66:
SEQUENCE CHARACTERISTICS:

TYPE:

LENGTH:

15 amino acids

TYPE: amino acid STRANDEDNESS:

linear peptide

NAME: Hunter, Tom
REGISTRATION NUMBER: 38,498
REFERENCE/DOCKET NUMBER: 01:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 543-9600
TELEPHONE: (415) 543-9600

015280-126110US

APPLICATION NUMBER: US 07/767,331
FILING DATE: 30-SEP-1991
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 07/596,289
FILING DATE: 12-OCT-1990
ATTORNEY/AGENT INFORMATION:

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US-08-331-397B-66
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Best Local Similarity 100.
8; Conservative
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                                                                          Sequence 66, Application US/08331397B Patent No. 5981726
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GENERAL INFORMATION:
                                                            GENERAL INFORMATION:
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     APPLICANT: Pastan, APPLICANT: Benhar, TITLE OF INVENTION: TITLE OF INVENTION:
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 617-345-9111
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/IB94/00387
FILING DATE: NOVEMBER 21, 1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: 617-345-9100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inch diskette, 1.4 Mb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                      STRANDEDNESS:
                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 30,237
REFERENCE/DOCKET NUMBER: 95,497-L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WordPerfect 6.1
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                                                                                                                                                                                     1 GGGLVQPG 8
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N: HUMANIZED ANTIBODIES AND USES
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5: 52
Chimeric and Mutationally Stabilized Tumor-
Specific Antibody Fragments, Fusion Proteins,
                                                                                                                                                                                                                        100.0%;
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and Uses
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; STRANDEDNESS:
; TOPOLOGY: lir
; MOLECULE TYPE:
US-08-331-397B-66
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Best Local Similarity
                                                                                                                                                                                                                                                                                                     Patent No.
                                                                                                                                                                                                                                                                                                                 Sequence 65, Application US/08759804A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 01
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 543-9600
TELEFAX: (415) 543-5043
INFORMATION FOR SEQ ID NO: 66:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/767,331
FILING DATE: 30-SEP-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/596,289
FILING DATE: 12-OCT-1990
ATTORNEY/AGENT INFORMATION:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                STREET: TWO LINES COLITY: San Francisco STATE: California
                                                                                                                                                                                                                                                     'APPLICANT:
APPLICANT:
                                                                                                                             CORRESPONDENCE ADDRESS: ADDRESSEE: Townsend
                                                                                                                                                                          TITLE OF INVENTION:
                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                           APPLICANT:
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ADDRESSEE: Townsend and Townsend and Crew
STREET: One Market Plaza, Steuart Street Plaza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
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NUMBER OF SEQUENCES:
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8 GGGLVQPG 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Hunter, Tom REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/0:
FILING DATE: 28-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                       INFORMATION:
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FitzGerald, Davi
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                      Tumor-Specific Antibody Fragments Fusion Proteins, and Uses Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 44; DB 2; 100.0%; Pred. No. 0.094;
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                                                                                                                                                                                                                                       David J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            38,498
                                                                                                                          Townsend
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                                                                                                         d and Crew LLP Eighth Floor
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CURRENT APPLICATION DATA:

APPLICATION NUMBER:

US/08/759,804A

OPERATING SYSTEM: SOFTWARE: Patenti

Patentin

PC-DOS/MS-DOS

Release #1.0, Version #1.30

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TELEPAX: (410)
INFORMATION FOR SEQ ID NO: 65
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
15 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                        ZIP: 94105-1492
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                              APPLICANT: Pastan, Ira
APPLICANT: Willingham, Mark
APPLICANT: FitzGerald, David
APPLICANT: Brinkmann, Ulrich
APPLICANT: Pai, Lee
TITLE OF INVENTION: Single Chain B3 Antibody Fusion Proteins
TITLE OF INVENTION: and Their Uses (as amended)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 019
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/596,289
FILING DATE: 12-OCT-1990
ATTORNEY/AGENT INFORMATION:
NAME: Webber, Ellen L.
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 015280-126140US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 08/331,398
FILING DATE: 28-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/767,331
FILING DATE: 30-SEP-1991
                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/331,398
                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 68
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew
STREET: One Market Plaza, Steuart Street Plaza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: peptide
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APPLICATION NUMBER:
PRIOR APPLICATION DATA:
                  APPLICATION NUMBER: US/08/331,398A FILING DATE: 28-OCT-1994 CLASSIFICATION: 435
                                                                                                                                                                                                                                              CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Natch 100.0%;
Local Similarity 100.0%;
Nes 8; Conservative 0
                                                                                                                                                                                                                     COUNTRY:
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ID NO: 65:
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Pred. No. 0.094;
0; Mismatches
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TELEFAX: (415) 543-5043
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                        TELEPHONE: 202-371-8850
                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Warren M. Cheek, J
REGISTRATION NUMBER: 33,
                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/4
FILING DATE: March 10, 1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: A DNA WHICH C TITLE OF INVENTION: A DNA WHICH C TITLE OF INVENTION: ANTIBODY NUMBER OF SEQUENCES: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER: 38,498
REFERENCE/DOCKET NUMBER: 01
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 543-9600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 12-OCT-1990
ATTORNEY/AGENT INFORMATION:
NAME: Hunter, Tom
MOLECULE TYPE: PORTIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Wordperfect 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: 1i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM CON
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Washington STATE: D.C.
                                          TYPE: amino acid
STRANDEDNESS: sir
                                TOPOLOGY:
                                                                                                                                                                                         REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET:
                                                                              CENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 GGGLVQPG 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                20005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Wenderoth, Lind & Ponack
805 Fifteenth Street, N.W., #700
                        single
linear
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                                                                                                                                                                                                                                                                                                                                                                                               IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                               Diskette, 3.5 inch, 1.44 mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide
                peptide
heavy chain of C179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 44; DB 1 100.0%; Pred. No. 0.11;
                                                                                                                                                                                                                                                                                                                                                                                   MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A DNA WHICH CODES FOR THE VARIABLE REGION OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                us 07/596,289
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ER: 015280-126110US
                                                                                                                                                                                                      33,367
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US-08-401-908-14

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RESULT 8
US-08-759-804A-54
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                                                                                          Query match
Best Local Similarity 100.
                                                                                                                                                                                            US-08-331-397B-55
                                                                                                                                                                                                                                                                                                                                                                              PRICKATION NUMBER: US/08/331,397B
FILLING DATE: 28-OCT-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/767,331
FILING DATE: 30-SEP-1991
PRIOR APPLICATION NUMBER: US 07/596,289
FILING DATE: 12-OCT-1990
ATTONNEY/AGENT INFORMATION:
NAME: Hunter, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-331-397B-55
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Best Local Similarity 100.
                                                                                                                                                                                                                                                                            TELEFAX: (415) 543-5043
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 55, Application US/08331397B Patent No. 5981726
                                                                                                                                                                                                  STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                           ATTURNAL, TOM
AME: Hunter, Tom
REGISTRATION NUMBER: 38,498
REFERENCE/DOCKET NUMBER: 015280-126120US
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 1415) 543-9600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Pastan, Ira
APPLICANT: Benhar, Itai
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                                                                                     1 GGGLVQPG 8
                                                                                                                                                                                                                                     LENGTH: 15 ....
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                        GGGLVQPG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
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                                                                                                                                                                                                                                                             18 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E: Townsend and Townsend and Crew
One Market Plaza, Steuart Street Plaza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PatentIn Release #1.0, Version #1.30
                                                                                                                        100.0%; Score 44; DB 2; 100.0%; Pred. No. 0.11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chimeric and Mutationally Stabilized Tumor-
Specific Antibody Fragments, Fusion Proteins, and Uses
Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
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                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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                                                                                                                                      Length 18;
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                                                                                                        0,
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CORRESPONDENCE ADDRESS:

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RESULT 9
US-08-859-931A-2
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                                                                                                        Sequence 2, Application US/08859931A Patent No. 5945510
                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                  Query Match
Best Local :
                                                                 GENERAL INFORMATION:
APPLICANT: FASANO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/759,804A
FILING DATE: 03-DEC-1996
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/331,398
FILING DATE: 28-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION UMBER: US 07/767,331
PRIOR APPLICATION DATA:
APPLICATION UMBER: US 07/596,289
ETILING DATE: 12-OCT-1990
ATTORNEY/AGENT INFORMATION:
NAME: Weber FILEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (415) 576-03
INFORMATION FOR SEQ ID NO:
                APPLICANT: FASANO, Alessio
TITLE OF INVENTION: SUBSTAI
TITLE OF INVENTION: PHYSIOI
TITLE OF INVENTION: MAMMALI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 54, Application US/08759804A Patent No. 5990296
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 01
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 68
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                           Local Similarity
nes 8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Tumor-Specific Antibody Fragments, TITLE OF INVENTION: Fusion Proteins, and Uses Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: APPLICANT:
                                                                                                                                                                                                          8 GGGLVQPG 15
                                                                                                                                                                                                                                          1 GGGLVQPG 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: TWO EMDGICULO CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Weber,
                                                                                                                                                                                                                                                                                                                                                                                                                                  amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (415)
(415) 57
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Willingham, Mark
FitzGerald, David J.
Brinkmann, Ulrich
                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFO...
, Ellen L.
, 32,762
, 795R: 32,762
, 015
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03-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5) 576-0300
576-0300
NO: 54:
         MAMMALIAN TIGHT JUNCTIONS
                        SUBSTANTIALLY PURE ZONULIN, PHYSIOLOGICAL MODULATOR OF
                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    576-0200
                                                                                                                                                                                                                                                                          0;
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Pred. No. 0.11;
Mismatches
                                                                                                                                                                                                                                                                                                    DB 2; Length 18;
                                                                                                                                                                                                                                                                  Indels
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ADDRESSEE:

SUGHRUE, MION, ZINN, MACPEAK & SEAS

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INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
TENGTH: 20 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 113, Application US/08053451B Patent No. 5955584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 30,764
REFERENCE/DOCKET NUMBER: A-
TELECOMMUNICATION INFORMATION:
ATTORNEY/AGENT INFORMATION:
NAME: Halluin, Albert P.
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 760
                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/053,451B
FILING DATE: 26-APR-1993
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/00
FILING DATE: 21 MAY 1997
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: KIT, Gordon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Chen, Francis W.
APPLICANT: Ditlow, Charles C.
APPLICANT: Calenoff, Emanuel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 10036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 2100 Penns
CITY: Washington,
                                                                                                                                                                                                                                                                                                              STREET:
                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
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                                                                                                                                                                                                                                                                                                              1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2100 Pennsylvania Avenue, N.W., Suite 800 ishington, D.C.
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ANTIGENS, ANTIBODIES THERETO, AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             293-7060
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   606-033-999
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Pred. No:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 2; Length 20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local :
                                                                                                                     FILING DATE: 21-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 93401310.3
FILING DATE: 21-MAY-1993
ATTORNEY/AGENT INFORMATION:
NAME: POTTER, Jane E.R.
REGISTRATION NUMBER: 33,332
REFERENCE/DOCKET NUMBER: 04958.0008
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
                                                                      TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Casterman, Ceci:
APPLICANT: Hamers, Raymond
TITLE OF INVENTION: Immuno
                                  SEQUENCE CHARACTERISTICS:
LENGTH: 26 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 06-JUI CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 1300 I S CITY: Washington STATE: D.C.
LENGTH: 26 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 08/106,944 FILING DATE: 17-AUG-1993 APPLICATION NUMBER: FR 92402326.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
nes 8; Conserv
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                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX:
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                                                                                           202-408-4400
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                                                                                                          202-408-4000
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)N: 530
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100.0%; Pred. No.
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linear

RESULT 12 US-08-467-282B-80

Sequence 80, Application US/08467282B Patent No. 5800988

GENERAL INFORMATION:

APPLICANT: Casterman, Cecile
APPLICANT: Hamers, Raymond
TITLE OF INVENTION: Immunoglobulins Devoid of Light Chains

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8 GGGLVQPG 15 GGGLVQPG 8

Query Match
Best Local Similarity |
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B; Conservat

Conservative

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100.0%;

Score 44; Pred. No. Mismatches

DB 1;

Length 26; Indels

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; MOLECULE TYPE: protein ; ORIGINAL SOURCE: ; ORGANISM: Camelus dro US-08-471-780C-80

Camelus dromedarius

В

8 GGGLVQPG

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                                                                                  Sequence 80, Application US/08466710C Patent No. 5874541
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Matches 8; Conserv
                                                                                                                                                                                                                                                                                           Query Match
                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC COMPATIBLE
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vers
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/471,282A
FILING DATE: 06-JUN-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION UNUMBER: US 08/106,944
FILING DATE: 17-AUG-1993
APPLICATION WIMBER: FR 92402326.0
FILING DATE: 21-AUG-1992
PRIOR APPLICATION NUMBER: FR 93401310.3
PPTITMS DATE: 21-AUG-1992
PRIOR APPLICATION NUMBER: FR 93401310.3
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US-08-471-282A-80
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ZIP: 20005-3315
COMPUTER READABLE FORM:
COMPUTER READABLE FLOPPY disk
MEDIUM TYPE: Floppy disk
MEDIUM FOR Compatible
THEM PC COMPATIBLE
THEM: PC-DOS/MS-DOS
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Patent No. 5840853
           APPLICANT: Casterman, Ceci
APPLICANT: Hamers, Raymond
TITLE OF INVENTION: Immuno
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8 GGGLVQPG 15
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ORIGINAL SOURCE:
ORGANISM: Cam
NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Potter, Jane E.R.
RESISTRATION NUMBER: 33,332
REFERENCE/DOCKET NUMBER: 04
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 21-MAY-1993
ATTORNEY/AGENT INFORMATION:
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TELEFAX: 2
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
STRANDEDNESS: sir
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
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                                               Casterman, Cecile
                                                                                                                                                                                                                                                                                                                                                                                                                                                          26 amino acids
                                                                                                                                                                                                                                                        Conservative
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21-MAY-1993
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lmmunoglobulins Devoid of Light Chains
130
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Query Match
Best Local Similarity
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1 GGGLVQPG 8
                               Conservative
                               100.0%; Score 44; DB 1; Length 26; 100.0%; Pred. No. 0.16;
                          Mismatches
                       Indels .
                     0;
                     Gaps
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; ORGANISM: US-08-467-282B-80

Camelus dromedarius

MOLECULE TYPE: ORIGINAL SOURCE:

protein

TOPOLOGY: STRANDEDNESS:

linear

single

ENGTH:

dmino acida

TELEPHONE: 202-408-400
TELEPAX: 202-408-4400
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:

80:

202-408-4000

NAME: POTTET, Jane E.R.
REGISTRATION NUMBER: 33,332
REFERENCE/DOCKET NUMBER: 04:
TELECOMMUNICATION INFORMATION:

04958.0008-00000

FILING DATE: 21-MAY-1993 ATTORNEY/AGENT INFORMATION:

UMBER: FR 93401310.3 21-MAY-1993

APPLICATION NUMBER:

APPLICATION NUMBER: FR 9: FILING DATE: 21-AUG-1992 PRIOR APPLICATION DATA:

APPLICATION NUMBER: US UO/100, APPLICATION NUMBER: 17-AUG-1993
FILING DATE: 17-AUG-1993
FILING DATE: FR 92402326.0

CLASSIFICATION: 536 PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/0 FILING DATE: 06-JUN-1995

US/08/467,282B

SOFTWARE: PatentIn Release #1.0, Version #1.25

ZIP: 20005-3315

COMPUTER READABLE FORM:
MEDIUM TYPE: FICPPY disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
CORTURNED: PC-DOS/MS-DOS

CITY: Washington

COUNTRY:

STREET:

E: Finnegan, Henderson, Farabow, Garrett & Dunner

ADDRESSEE:

CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & Dunner
STREET: 1300 I Street, N.W.

STREET: 1300 I St CITY: Washington STATE: D.C.

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Query Match
Best Local Similarity
Watches 8; Conserve
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APPLICATION NUMBER: FR 92402326.0
FILING DATE: 21-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 93401310.3
FILING DATE: 21-MAY-1993
ATTORNEY/AGENT INFORMATION:
DATE: TEO.F. D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
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TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO:
ZIP: 2005-3315

ZIP: 2005-3315

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & Dunner STREET: 1300 I Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 26 amino acids
TYPE: amino acid
STRANDEDNESS: single
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Casterman, Cecile APPLICANT: Hamers, Raymond TITLE OF INVENTION: Immunogle NUMBER OF SEQUENCES: 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
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8 GGGLVQPG 15
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CITY: Washington
STATE: D.C.
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APPLICATION NUMBER: 17-AUG-1993
CONTROL OF THE PROPERTY OF THE PROP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                      COUNTRY:
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ER: 04958.0008-00000
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       Version #1.25
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                                                               Query Match
Best Local Similarity
Matches 8; Conserv
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TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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PRIOR APPLICATION NUMBER: US 08/106,944
PILING DATE: 17-AUG-1993
FILING DATE: 17-AUG-1993
PRIOR TOATION NUMBER: FR 92402326.0
                                                                                                                                                                MOLECULE TYPE: protein ORIGINAL SOURCE: ORGANISM: Camelus dr
                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 21-AUG-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 04
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 21-MAY-1993
ATTÖRNEY/AGENT INFORMATION:
NAME: Potter, Jane E.R.
REGISTRATION NUMBER: 33,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 06-JUN-19
                                                                                                                                                                                                                                            TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                              STRANDEDNESS:
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                               1 GGGLVQPG 8
GGGLVQPG 15
                                                                                                                                                                                                                                                                 26 amino acids
                                                                 Conservative
                                                                                                                                                                Camelus dromedarius
                                                                                                                                                                                                                  Linear
                                                                                                                                                                                                                                                                                                                                 202-408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-JUN-1995
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                                                            100.0%; Score 44; DB 3
100.0%; Pred. No. 0.16;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                    FR 93401310.3
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                                                                                                                                                                                                                                                                                                                                                                 04958.0008-00000
                                                                                              DB 3;
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                                                                                             Length 26;
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Search completed: June 13, Job time: 627 sec 2001, 14:27:06

Gaps

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Result
No.
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Maximum Match 100%
Listing first 45 s
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Maximum DB
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Perfect score:
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.Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                              /SIDS6/gcgdata/geneseq/geneseqp/AA1989.DAT: *
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                                                                                                                                                                                                                                           BB
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                                                                                                                                                          Y79128
Y79126
R97334
                                                             B65728
Y29905
Y29903
Y79127
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                                                                                                                                                                                                                                                                                                  SUMMARIES
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                                   Human MDC and huma
Nucellin-like aspa
Human SDF-1 and hu
Human MCP-3 and hu
Peptide antagonist
Peptide from human
                                                                                                                                                                                                                                       Description
                                                                                                                                                                             Peptide antagonist
Peptide antagonist
                                                                                                                                                          Murine NEWM MN-14
from
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Partial peptide fr	Y56660	21	98	83.7	36	5
antib	B40097	21	98	ω	36	44
Anti-hILl2 antibod	B40096	21	98	ω.	36	3
Anti-hIL12 antibod	B40095	21	98	ω ·	36	42
	B40094	21	98	83.7	36	41
	B40093	21	98	ω.	36	40
N	B40087	21	98	ω ·	36	39
	B40086	21	98	ω.	36	38
Anti-hIL12 antibod	B40085	21	98	Ψ	36	37
N	B40084	21	98	ω.	36	36
-h1L12	B40072	21	98	ω.	36	35
Anti-RSV F protein	W59614	19	98	ω.	36	34
DP54 VH region. H	R72074	16	98	ω ·	36	33
SpA-reactive VH re	R54816	15	98	w	36	32
-	R52066	15	98	ω	36	31
Human TNF binding	R34279	14	98	ω	36	30
hIL12	B40135	21	97	ω.	36	29
hIL12	B40112	21	97	ω.	36	28
hIL12 ant	в40092	21	97	ü	36	27
IL12 an	B40089	21	97	ω.	36	26
5' EST rela	Y64844	21	96	ω.	36	25
l pept	Y56646	21	96	ω.	36	24
ÉS	Y11665	20	93	w.	36	23
ogous sequen	R92997	17	87	ω ·	36	22
5' EST	Y64925	21	84	ω ·	36	21
₽.	Y64774	21	73	ω ·	36	20
eutralising	R76969	16	62	ω	36	19
H-chain variable r	P61028	7	40	w.	36	18
heavy chai	Y68811	21	30	ω ·	36	17
group	R87049	17	30	ω.	36	16
adult	Y79130	21	20	u	36	15
lt heart	448	20	20	ω	36	14
erminal of C17	œ	16	18	ω.	36	13
IgG heavy chain fr	W73953	16	18		36	12

ALIGNMENTS

RESULT Y79128

05-JUN-2000 (first entry)

Peptide antagonist of zonulin.

Y79128;

Y79128 standard; Peptide; 8

Å

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WPI; 2000-205565/18
                                                                                                                                                                                                           Zonulin; antagonist; zonula occludens toxin receptor; blood brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antiulcer; antiviral; antibacterial; cytostatic; anti-HIV; vulnerary; antialler
                                                                                                                          17-FEB-2000
                                                                                                                                                                                       hypotensive; immunosuppressive; antipar gastrointestinal inflammation; therapy.
                                       Fasano A;
                                                                                 03-AUG-1998;
                                                                                                     28-JUL-1999;
                                                                                                                                               WO200007609-A1.
                                                                                                                                                                    Synthetic.
                                                           (UYMA-) UNIV MARYLAND BALTIMORE
                                                                                                                                                                                                             cytostatic; anti-HIV; vulnerary; antiallergic;
                                                                                 98US-0127815.
                                                                                                     99WO-US16683
                                                                                                                                                                                                   antiparasitic;
                                                                                                                                                                                                   vasotropic;
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New peptide antagonist of zonulin useful as antiinflammatory agent for

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This present sequence is that of a peptide antagonist of zonulin CC (2), one of 25 such peptides (see Y79105-29) of the invention, which bind to a zonula occludent toxin (ZOT) receptor, yet do not CC (TJ). The peptide antagonists are based on a common motif of ZOT cand human zonulins, which is believed to be critical for receptor cc and human zonulins, which is believed to be critical for receptor cc inflammation, where they bind to the ZOT receptor in the intestine cf inflammation, where they bind to the ZOT receptor in the intestine cc intestine. Gastrointestinal inflammation conditions give rise to creased intestinal permeability and the peptide is useful for caused by infection, e.g. Clostridium difficie infection, concentrations that cause protein losing enteropathy cc intestinal conditions that cause protein losing enteropathy cc infestation, bacterial overgrowth, whipple s disease, with cc collagenous colitis, inflammatory bowel disease, diseases with cc correction of congenital heart disease with Fontan's operation, collisases without ulceration, e.g. Menetries' disease, costaophilic gastroenteritis, and immune disease, cc. systemic lupus ervthematorys or fond allowance disease, cc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                            (UYMA-) UNIV MARYLAND BALTIMORE
                                                            03-AUG-1998;
                                                                                                                                                                                                     gastrointestinal inflammation; therapy
                                                                                                                                                                                                             Zonulin; antagonist; zonula occludens toxin receptor; blood-brain barrier; antiinflammatory; cerebroprotective; neuroprotective; dermatological; antiulcer; antiviral; antibacterial; cytostatic; anti-HIV; vulnerary; antiallergic; hypotensive; immunosuppressive; antiparasitic; vasotropic;
                                                                                                                                                                                  Synthetic
                                                                                          28-ЈИЦ-1999;
                                                                                                                                                     WO200007609-A1
                                                                                                                                                                                                                                                                                                                                         05-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                            Peptide antagonist of zonulin.
                                                                                                                                                                                                                                                                                                                                                                                                  Y79126 standard; Peptide; 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treating cerebral ischemia, stroke, shigellosis, viral gastroenteritis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 100, nes 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGGLVQDG 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggglvqdg 8
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                                                         98US-0127815
                                                                                     99WO-US16683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 43;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or food allergies, primarily
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cerebral edema, gastritis,
meningitis, encephalomyelitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .2e+05;
s 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21;
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В
                                                                                                                                                                                                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                                                                                                                                                               δ
A
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Best Local
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Similarity

Length 8;

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This present sequence is that of a peptide antagonist of zonulin CC (Z), one of 25 such peptides (see Y79105-29) of the invention, CC which bind to a zonula occludens toxin (ZOT) receptor, yet do not CC physiologically modulate the opening of mammalian tight junctions (ZT). The peptide antagonists are based on a common motif of ZOT CC and human zonulins, which is believed to be critical for receptor CC and human zonulins, which is believed to be critical for receptor CC antifolian tDNA techniques. The peptide antagonists are used as an inflammatory agents in the treatment of gastrointestinal CC and yet does not physiologically modulate the opening of Ty in the CC increased intestinal permeability and the peptide is useful for CC treating intestinal conditions that cause protein losing enteropathy caused by infection, e.g. Clostridium difficile infection, enterocolitis, shigellosis, viral gastroenteritis, parasite mucosal erosion or ulcerations, e.g. gastritis, gastric cancer, CC infestation bacterial overgrowth, whipple's disease, diseases with collegenous colitis, inflammatory bowel disease, diseases with collegenous colitis, inflammatory bowel disease, diseases marked by sarcoidosis lymphoma, mesenteric tuberculosis, and after surgical correction of congenital heart disease with Fontan's operation, ceg. solitis, and disease with solitis and disease, eosinophilic gastroenteritis, and immune diseases, ceg. gastroenteries disease, eosinophilic gastroenteritis, and immune diseases, ceg. gastroenteries, disease, comparation, e.g. wenettrier's disease, comparation, e.g. solitis, and immune diseases, ceg. gastroenteritis, and immune diseases.
                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New peptide antagonist of zonulin useful as antiinflammatory agent treating cerebral ischemia, stroke, cerebral edema, gastritis, shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 48; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fasano
                                                                                                                                                                                                                                                                   8
88.4%;
87.5%;
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Binding-site
                                              Binding-site
                                                                            Binding-site
                                                                                                                                       Monoclonal antibody; humanised; mouse; framework region; FR; CDR, complementary determining region; anti-carcinoembryonic antigen; CEA; diagnosis; imaging; therapy; immune response.
                                                                                                                                                                                                    Murine NEWM MN-14 variable region heavy chain.
                                                                                                                         Mus musculus
                                                                                                                                                                                                                                              15-OCT-1996
                                                                                                                                                                                                                                                                                                    R97334 standard;
                                                                                                                                                                                                                                                                                                                                                                               \vdash
                                                                                                                                                                                                                                                                                                                                                                                            1 GGGLVQDG 8
                                                                                                                                                                                                                                                                                                                                    ω
                                                                                                                                                                                                                                                                                                                                                                            999cvqdg
                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
/label= CDR 2.
99..108
/label= CDR 3.
                                            /label= CDR 1.
50..66
                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                 Protein; 119 AA
                                                                                                                                                                                                                                                                                                                                                                                                                              Score 38; DB 21;
Pred. No. 3.2e+05;
0; Mismatches 1
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                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
7; Conserv
                                                                                                                                                                                                                                                                                                                               New humanised monoclonal antibodies (MAbs) comprising the complementary determining regions (CDRs) of a parental murine class III anti-carcinoembryonic (CEA) MAb engrafted to the framework regions (FRs) of a heterologous antibody which can be derived from any species including human, retain the anti-CEA binding specificity of the parental murine MAb but are less immunogenic in a human subject than the parental MAb. The humanised antibodies can be used in diagnosis, imaging and therapy of CEA-producing cancers and patients receiving the humanised antibodies and conjugates show improved induced in diagnosis, imaging and therapy of CEA-producing cancers and patients receiving the humanised antibodies and conjugates show improved induced induced adverse effects compared to the parent antibody. See R97313-97333 for the CDR sequence and framework
                                                                                             Synthetic.
                                                                                                                     Chemokine; tumour; viral; antigen; fusion protein; cancer; vaccine; immune response; HIV; infection.
                         12-MAR-1998;
                                                                            WO9946392-A1
                                                                                                      Homo sapiens
                                                                                                                                                  Human MDC and
                                                                                                                                                                  17-NOV-1999
                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 5; Figure 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDRs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1996-209653/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Armour KL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-OCT-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-APR-1996
       (USSH ) US DEPT HEALTH & HUMAN SERVICES
                                           12-MAR-1999;
                                                           16-SEP-1999
                                                                                                                                                                                     Y29904;
                                                                                                                                                                                                      Y29904 standard; Protein; 334 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New humanised anti-CEA monoclonal antibody - having engrafted murine CDRs, used for diagnosis, imaging and therapy of CEA-producing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (IMMU-) IMMUNOMEDICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9611013-A1
                                                                                                                                                                                                                                                                                                                                                regions of the humanised MAbs.
                                                                                                                                                                                                                                                 æ
                                                                                                                                                                                                                                                         GGGLVQDG
                                                                                                                                                                                                                                                 ggglvgsg 15
                                                                                                                                                                                                                                                                                                                               119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hansen HJ;
                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                 (first entry)
                                                                                                                                                 human scFV fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94US-0318157
                        98US-0077745.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95WO-US11964
                                          99WO-US05345
                                                                                                                                                                                                                                                                                            86.0%;
87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62pp; English.
                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                          Score
Pred.
                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                            37;
No.
                                                                                                                                                                                                                                                                                            DB
14;
                                                                                                                                                                                                                                                                                                    17;
                                                                                                                                                                                                                                                                                   1;
                                                                                                                                                                                                                                                                                                    Length 119;
                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                   Gaps
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B65728
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     forestry plant
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The present invention describes fusion proteins comprising a chemokine and a tumour antigen or HIV antigen. Specifically claimed fusion proteins comprise: (1) human monocyte chemotactic protein-3 (MCP-3) and human Muc-1; (2) human interferon induced protein 10 (IP-10) and human Muc-1; (3) human macrophage-derived chemokine (MCD) and human Muc-1; (4) human SDF-1 and human MCP-3 and HIV gpl20; (7) human MCD and HIV gpl20; and (8) human SDF-1 and HIV gpl20. The fusion proteins, and nucleotide sequences encoding them, can be used for producing an immune response, e.g. an effector T cell immune response. They can also be used for treating cancer or treating or preventing HIV infection. The fusion proteins and/or nucleotide sequences can be used in in vitro diagnostic assays, as well as in screening assays for identifying unknown tumour antigen epitopes and fine mapping of tumour antigen epitopes. The present sequence represents a specifically claimed fusion protein from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 7; Conser
Novel defender against cell death polynucleotide useful for modulating programmed cell death pathway and specific development pathways in
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                                                                                   WPI; 2001-061724/07
N-PSDB; F44754.
                                                                                                                                                              Flinn B,
                                                                                                                                                                                                                                                                                                04-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                  02-JUN-2000; 2000WO-NZ00086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pinus radiata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cell death modulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B65728 standard; Protein; 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 73; Page 134-135; 142pp; English.
                                                                                                                                                                                                                (GENE-) GENESIS RES & DEV CORP LTD. (FLET-) FLETCHER CHALLENGE FORESTS
                                                                                                                                                                                                                                                                                                                                                                                                          14 - DEC - 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200075331-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      forestry plant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucellin-like aspartic protease #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                в65728;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kwak LW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 87 ggglvqsg 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GGGLVQDG 8
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                                                                                                                                                           Lasham A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              334
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                99US-0325932
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               programmed cell death;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 37; DB Pred. No. 40; 0; Mismatches
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                                                                                                                                                                                                                   CTD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCD; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 334;
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The present invention describes fusion proteins comprising a chemokine CC and a tumour antigen or HIV antigen. Specifically claimed fusion proteins CC comprise: (1) human monocyte chemotactic protein-3 (MCP-3) and human CC (Muc-1; (2) human interferon-induced protein 10 (IP-10) and human Muc-1; (2) human Muc-1; (5) human IP-10 and HIV 9p120; (6) human MCP-3 and CC HIV 9p120; (7) human MCP and HIV 9p120; and (8) human MCP-3 and CC (9p120). The fusion proteins, and nucleotide sequences encoding them, can CC be used for producing an immune response, e.g. an effector T cell immune CC preventing HIV infection. The fusion proteins and/or nucleotide sequences compared to the used in in vitro diagnostic assays, as well as in screening assays. CC can be used in in vitro diagnostic assays, as well as in screening assays. CC tumour antigen epitopes and fine mapping of continuour antigen epitopes. The present sequence represents a specifically
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
Y29905
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Best Local Similarity 100
Matches 7; Conservative
                                                                                                                                                                                                                                                     Claim 73; Page 136; 142pp; English.
                                                                                                                                                                                                                                                                                            New fusion polypeptides comprising a chemokine and HIV antigen, used for treating cancers or treating infection ...
                                                                                                                                                                                                                                                                                                                                                                                          Kwak LW,
                                                                                                                                                                                                                                                                                                                                                                                                                    (USSH ) US DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chemokine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human SDF-1 and human scFV fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to coding sequences (see F44740-F44840 and F44843-F44844) and proteins (see B65714-B65814) involved in programmed cell death (PCD; apoptosis). The coding sequences and proteins of the present invention are useful for modulating a PCD or cell death pathway and various developmental pathways in a forestry plant, by stably incorporating one of the present coding sequences into the genome of the forestry plant, where the coding sequences into the genome of the not present in a native form of the forestry plant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chemokine; tumour; viral; antige
immune response; HIV; infection.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  86.0%; Pr
100.0%; Pr
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                                   a tumour antigen or or preventing HIV
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CC The present invention describes fusion proteins comprising a chemokine CC and a tumour antigen or HIV antigen. Specifically claimed fusion proteins CC wuc-1; (2) human monocyte chemotactic protein-3 (MCP-3) and human CC Muc-1; (2) human monocyte chemotactic protein-10 (IP-10) and human Muc-1; (3) human fusion protein 10 (IP-10) and human Muc-1; (4) human CC SDF-1 and human Muc-1; (5) human IP-10 and HIV 9p120; (6) human MCP-3 and CC HIV 9p120; (7) human MDC and HIV 9p120; and (B) human SDF-1 and HIV CC SDF-1 and human MCP-3 and SDF-1 and HIV SDF-1 and H
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Best Local S
Matches 7
Sequence
                                                                                                                                                                                                                                                                                                                                                                                           Claim 73; Page 132; 142pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                     New fusion polypeptides comprising a chemokine and a tumour antigen of HIV antigen, used for treating cancers or treating or preventing HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-551418/46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kwak LW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (USSH)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-MAR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Biragyn A;
348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tumour; viral; antigen; fusion protein; cancer; vaccine;
ponse; HIV; infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEPT HEALTH & HUMAN SERVICES
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87.5%;
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Pred. No.
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Query Match
Best Local Similarity
7; Conserve

ÅΑ

Conservative

0;

86.0%; 87.5%;

Score 37; DB Pred. No. 41; 0; Mismatches

20;

Length 348

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RESULT
Y79127
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                                                                                                                                                                                                                                                                                 03-AUG-1998;
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                                                                                                                                                                                                                                                                                                                         WO200007609-A1
                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                   hypotensive; immunosuppressive; antiparasitic; vasotropic gastrointestinal inflammation; therapy.
                                                                                                                                                                                                                                                                                                                                                                 neuroprotective; dermatological; antiulcer; antiviral;
antibacterial; cytostatic; anti-HIV; vulnerary; antiallergic;
                                                                                                                                                                                                                                                                                                                                                                               Zonulin; antagonist; blood-brain barrier;
                                                                                                                                                                                                                                                                   (UYMA-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                   Peptide antagonist of zonulin
                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUN-2000
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|||||| |
                   systemic
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                                                                                                                                                                                                                                                                                                                                                                               zonula occludens toxin receptor;
antiinflammatory; cerebroprotect
                                                                                                                                                                                                                                                                                                                                                                               cerebroprotective;
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CC (2), one of 25 such peptides (see Y79105-29) of the invention, (C2), one of 25 such peptides (see Y79105-29) of the invention, (C2) one of 25 such peptides (see Y79105-29) receptor, yet do not condition to the property of the inventions (C2) receptor of the inventions (C3). The peptide antagonists are based on a common motif of 20 and human zonulins, which is believed to be critical for receptor conditions of the peptide antagonists are based on a common motif of 20 and human zonulins, which is believed to be critical for receptor conditions of the peptide antagonists are used as an endowed an expense of the combinant DNA techniques. The peptide antagonists are used as an end of the combinant DNA techniques. The peptide antagonists are used as an end of the combinant DNA techniques. The peptide antagonists are used as an end of the combinant DNA techniques. The peptide antagonists are used as an end of the combination of the intestinal end of the conditions give rise to inflammation. Where they bind to the ZOT receptor in the intestinal end of the conditions give rise to increased intestinal conditions that cause protein gof TJ in the concertivation, inflammation and the peptide is useful for treating intestinal conditions that cause protein losing enteropathy concertive parasite intestinal erosion or ulcerations, that cause protein losing enteropathy concertion, bacterial overgrowth, whipple's disease, diseases with concertive collagenous colitis, shigellosis, viral gastrictis, parasite with concertion of congenital heart disease, disease, diseases with concertion of congenital heart disease with frontan's operation, concertion of congenital heart disease with frontan's operation, concertion of congenital heart disease with frontan's operation, concertions and immune disease, concellar diseases, established the perimetally to
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allergies, primarily
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Sequence

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1 GGGLVQDG

Matches Query Match Best Local

Local Similarity nes 7; Conserv

Conservative

0,

83.7%;

Score 36; DB Pred. No. 2; 0; Mismatches

20; 1;

Length 13;

Indels

0;

Gaps

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96098W
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Best Local Similarity
Matches 7; Conserv
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21 - MAY-1997;
31 - JUL-1997;
28 - NOV-1997;
02 - DEC-1997;
                               The invention relates to a method for the production of non-immunogenic proteins. The method comprises determining at least part of the amino acid sequence of the protein; (b) identifying in the amino acid sequence one or more potential epitopes for T-cells (T-cell epitopes) of the given species; and (c) modifying the amino acid sequence to eliminate at least one of the T-cell epitopes identified in step (b) thereby to eliminate or reduce the immunogenicity of the protein when exposed to the immune system of the given species. A method of analysing a pre-existing protein to predict the basis for immunogenic responses is also provided. The methods can be used particularly for reducing the immunogenicity of immunogeniting the immunogenities. From humanised A33 heavy chain variable region predicted by
                                                                                                                                                                                                                                   Reducing immunogenicity sequence of the protein of a given species
                                                                                                                                                                                                             Example 5;
                                                                                                                                                                                                                                                                                        WPI; 1999-045301/04
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W86096;
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Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                         21-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                       (BIOV-) BIOVATION LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immunoglobulin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GGGLVQDG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard;
                       threading.
                                                                                                                                                                                                             Page 34; 77pp; English
13
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97GB-0016197.
97GB-0025270.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            therapeutic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       epitope;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     83.7%;
87.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T-cell; immunogenicity; immune system; ic; streptokinase; diagnosis; human; A3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                  proteins - by modifying the amino acid eliminate potential epitopes for T-cel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                heavy chain variable region.
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Pred. No. 3.
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3.2e+05;
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                                                                                                                                                                                                                                                   for T-cells
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В

ggglvqpg

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                        88098W
                                   RESULT 11
                                                                                                                                       Query Match
Best Local
                                                                                                                             Matches
    W86088 standard; peptide; 13
                                                                                                                                                                                                                  The invention relates to a method for the production of non-immunogenic proteins. The method comprises determining at least part of the amino acid sequence of the protein; (b) identifying in the amino acid sequence one or more potential epitopes for T-cells (T-cell epitopes) of the given one of the T-cell epitopes identified in step (b) thereby to eliminate at least reduce the immunogenicity of the protein when exposed to the immune system of the given species. A method of analysing a pre-existing protein methods can be used particularly for reducing the immunogenicity of immunogenic responses is also provided. The immunoglobulins or therapeutic proteins, e.g. Streptokinase. The products can be used for diagnosis and therapy. Sequences W86075-W86114 represent peptides from humanised A33 heavy chain variable region predicted by
                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                          Reducing immunogenicity of proteins - by modifying the amino acid sequence of the protein to eliminate potential epitopes for T-cells
                                                                                                                                                                                                                                                                                                                                                                                                         Example 5; Page 33; 77pp; English
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21-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide from humanised A33 heavy chain variable region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Non-immunogenic; epitope; T-cell; immunogenicity; immune system; immunoglobulin; therapeutic; streptokinase; diagnosis; human; A33.
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                                                                                                                                     Local Similarity
                                                                         6
                                                                                    1 GGGLVQDG 8
                                                                     ggglvgpg
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                                                                                                                                                                                         13 AA;
                                                                                                                          Conservative
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97GB-0010480.
97GB-0016197.
97GB-0025270.
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                                                                                                                                    83.7%;
                                                                                                                        0;
                                                                                                                                   Score 36;
Pred. No.
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                                                                                                                      Mismatches
                                                                                                                                               DB
                                                                                                                                               20;
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RESULT
W73953
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Best Local S
Matches 7
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                          IgG heavy chain fragment, IgG (VH) (18).
IgG heavy chain; immune complex removal; conglutinin; infection;
                                                                                                      W73953 standard; peptide; 18
                                                          26-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-APR-1998;
21-MAY-1997;
31-JUL-1997;
28-NOV-1997;
                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Reducing immunogenicity sequence of the protein of a given species
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 5; Page 33; 77pp; English.
                                                                                                                                                                                                                                                                                                               peptide threading.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-045301/04.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Non-immunogenic; epitope; T-cell; immunogenicity; immune system; immunoglobulin; therapeutic; streptokinase; diagnosis; human; A33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide from humanised A33 heavy chain variable region
                                                                                                                                                                       3 ggglvgpg :
                                                                                                                                                                                                                           Local Similarity
mes 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-MAR-1999
                                                                                                                                     12
                                                                                                                                                                                                1 GGGLVQDG 8
                                                                                                                                                                                                                                                                                       13 AA;
                                                                                                                                                                                                                         Conservative
                                                        (first entry)
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97GB-0010480.
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97GB-0025270.
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                                                                                                                                                                                                                                     83.7%;
87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of proteins - by modifying the amino acid to eliminate potential epitopes for T-cel
                                                                                                                                                                                                                         0
                                                                                                         Å
                                                                                                                                                                                                                                   Score 36; I
Pred. No. 2;
                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                               DB
                                                                                                                                                                                                                                               20;
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RESULT 13
R82833
ID R82833
XX R82833
AC R82833
XX R99-MAY
XX Antibo
KW Antibo
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KW comple
XX Antibo
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This sequence represents a fragment of the IgG heavy chain. This sequence was isolated using the biomedical device of the invention, which comprises: (a) a biocompatible support; and (b) conglutinin which is covalently bound to the support. The device can be used for removing immune complexes (IC) from a fluid. This can be used for treating a mammal or for evaluating the status of a mammal. It can be used for treating diseases such as serum sickness, chronic immune complex nephritis, bacterial infections, viral infections, parasitic diseases, autoimmune diseases or neoplastic diseases. The devices can also be used for purification of IC and to study immune pathogenesis and antigens associated with a disease state. The covalently immobilised conglutinin can capture IC with high capacity and specificity and allows elution under mild conditions. The devices are stable with no loss of IC binding
                                                                                                                                                                                                                                                                              Antibody; human; influenza type A virus; H1N1; H2N2; H3N2; HA; diagnosis; haemagglutinin; variable light chain; therapy; CDR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New biomedical device for binding conglutinin covalently bound to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-AUG-1994;
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autoimmune disease; neoplastic disease; immune pathogenesis; therapy
                             14-MAR-1995;
                                                                                    04-OCT-1995.
                                                                                                                                        EP675199-A2
                                                                                                                                                                                                Mus musculus
                                                                                                                                                                                                                                                    complementarity
                                                                                                                                                                                                                                                                                                                                                                   N-terminal of C179 heavy chain.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R82833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R82833 standard; Peptide; 18
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7; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                             95EP-0301664
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                                                                                                                                                                                                                                                    determining region.
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solid phase material
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R82833 and R82834 represent the N-terminal sequences of the heavy chain CC and light chain of an anti-human influenza A type virus antibody. The antibody these sequences were obtained from was isolated from hybridoma CC C179. The antibody recognises the stem region of the haemagylutinin (HA) CC molecule of the H1N1 and H2N2 subtypes of human influenza A type virus, CC and shows neutralisation activity against these two subtypes. The CC antibody shows no recognition of the H3N2 subtype. The DNA encoding the CC variable heavy chain sequence (see T04159) and the variable light chain CC coding sequence (see T04150) are useful in the production of artificial CC coding sequence (see T04150) are useful in the production of artificial CC coding sequence (see T04150) are useful in the diagnosis and treatment of human CC influenza. As the antibodies are useful in the diagnosis and treatment of human CC influenza. As the antibodies recognise the stem region of the HA molecule CC changes. This provides an advantage over current vaccines, as the virus company of the that the contraction of the HA molecule contraction of the HA molecule.
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Best Local S
Matches 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gene encoding variable region of anti-human influenza antibody - useful for prodn. of artificial antibodies
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                                                                                                                                                                                                                                                                                    WO9852415-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W94487;
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                                                       WPI; 1999-070123/06
                                                                                                                                                                                                         28-APR-1998;
                                                                                                                                                                                                                                               26-NOV-1998
                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                             Vibrio cholerae;
                                                                                                                                                                                                                                                                                                                                                                                               zonulin; mammalian tight junction; zonula occludens toxin; ZOT;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Human adult heart zonulin N-terminal peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TAKI ) TAKARA SHUZO CO LTD.
                                                                                                                              (UYMA-) UNIV MARYLAND BALTIMORE
                                                                                                                                                                    21-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                             intestinal mucosa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 7; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
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                                                                                                                                                                    97US-0859931
                                                                                                                                                                                                         98WO-US07636.
                                                                                                                                                                                                                                                                                                                                                                               vaccine; cholera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     peptide;
                                                                                                                                                                                                                                                                                                                                                             nasal mucosa; blood brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             83.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ikunoshin K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
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Pred. No. 2.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                             toxin; polyclonal antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Takashi T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16;
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New purified zonulin - which is mammalian tight junctions, used

capable of reversibly opening for enhancing the delivery of agents

across intestinal and nasal mucosa and blood brain barrier

Page 45; 64pp; English

```
cc opening mammalian tight junctions. Zonulin proteins function as
CC physiological modulators of mammalian tight junctions. They can be used
CC for enhancing the absorption of therapeutic agents across tight
CC the blood brain barrier. Zonulin can be used with agents such as drugs,
CC e.g. lidocaine, adenosine, dobutamine; dopamine, epinephrine,
CC uprenorphine, naloxone, ketorolac, midazolam, propofol, metacurine,
CC mivacurium, succinylcholine, cytarabine, mitomycin doxorubicin,
CC vinoristine, vinblastine, methicillin, mezlocillin, piperacillin,
CC cetoxitin, cefenicid, cefmetazole and aztreonam, a hormone e.g.
CC vinoristine, vinblastine, menotropins, insulin, urofolitropin,
CC cetoxitin, cefenicid, cefmetazole and aztreonam, a hormone e.g.
CC interferon-alpha, interferon-beta, interferon-gamma, interleukin-1
CC the proteins can also be used for the production of antibodies which can be used to assay for zonulin in body tissue or fluids, or in affinity-
cu purification of zonulin. The present sequence represents an N-terminal xx
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
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New peptide antagonist of zonulin useful as antiinflammatory agent treating cerebral ischemia, stroke, cerebral edema, gastritis, shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
                                                                                                      WPI; 2000-205565/18
                                                                                                                                                                                              (UYMA-) UNIV MARYLAND BALTIMORE
                                                                                                                                                                                                                                             03-AUG-1998;
                                                                                                                                                                                                                                                                                                                                   17-FEB-2000.
                                                                                                                                                                                                                                                                                                                                                                              W0200007609-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zonulin; antagonist; zonula occludens toxin receptor; human; blood-brain barrier; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human adult heart zonulin N-terminal sequence
                                                                                                                                                                                                                                                                                      28-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               gastrointestinal inflammation; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Y79130;
                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Y79130 standard; Peptide; 20 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes pure zonulin which has an apparent molecular weight of 47 kD, as determined by SDS-PAGE, which is recognised by both anti-tau polyclonal antibody and by anti-zonula occludens toxin (ZOT) polyclonal antibody, and is capable of reversibly opening mammalian tight junctions. Zonulin proteins function as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . 1 GGGLVQDG 8
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                                                                                                                                                                                                                                           98US-0127815
                                                                                                                                                                                                                                                                                   99WO-US16683
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SX CCCCCCCCXX
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                                  Matches
                                             Query Match
Best Local Similarity
                                                                                                                                           The present sequence is that of the N-terminal region of adult human heart zonulin. The N-terminal sequences of human adult and foetal zonulins (see Y79130-36) were compared with Vibrio cholerae zonula occludens toxin (207) to identify a common motif thought to be involved in receptor binding. Peptide antagonists (see Y79105-29) based on this motif are useful as antiinflammatory agents for treatment of gastrointestinal inflammation, and for treatment of conditions associated with breakdown of the blood-brain
                                                                                                              Sequence
                                                                                                                                                                                                                                                                                          Example 3; Fig 6; 69pp; English.
1 GGGLVQDG 8
                                7;
                                                                                                              20
                                Conservative
                                                                                                              A,
                                               83.7%;
87.5%;
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                                             Score 36; I
                               Mismatches
                                          DB 21;
3.2;
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                                                         Length 20
                          0;
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Search completed: June 13, 2001, 14:25:45 Job time: 664 sec

В

8 ggglvqpg 15

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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  score
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                                                                                                                                                                                                                                                                                                                                                                      seq
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   protein search, using sw
                                                                                                                                                                                                                                                                                                                                                                      length: 0
length: 2000000000
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  June 13, 2001, 14:23:10; Search time 87.97 Seconds (without alignments) 6.250 Million cell updates/sec
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Compugen Ltd
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Ig heavy chain V r
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b33 antigen homol
b33 antigen homol
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36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	
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111	111	111	106	105	105	101	101	100	100	100	100	. 98	98	98	
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869911	PH1028	MHMS76	S24521	PL0255	S38488	PU0002	PU0003	S26926	S26925	S69896	PL0122	S26934	S26933	S26889	
Ig	Ig	Ig	Ig	Ig	Ig	Ig	Ig	Ig	Ig	Ig	Ig	Ig	Ig	Ig	•
Ig V-D-J	Ig heavy	Ig heavy	Ig heavy	Ig heavy	Ig heavy	Ig heavy	Ig heavy	Ig heavy	Ig heavy	Ig heavy	Ig heavy	Ig heavy	Ig heavy	Ig heavy	
Ig V-D-J region	Ig heavy chain	_	Ig heavy chain	Ig heavy chain	Ig heavy chain			Ig heavy chain	-			_	, heavy	Ig heavy chain	

ALIGNMENTS

RESULT C82630

C;Species: Xylella fastidiosa C;Date: 18-Aug-2000 #sequence_revision

C; Accession: C82630

serine proteinase XF1851 [imported] - Xylella fastidiosa (strain 9a5c)

A;Title: The genome sequence of the plant pathogen Xylella fastidiosa. A;Reference number: A82515; MUID:20365717
A;Note: for a complete list of authors see reference number A59328 below

 $R; anonymous, \ \mbox{The Xylella fastidiosa Consortium of the Organization for Nucleotide Seq. Nature 406, 151-157, 2000$

20-Aug-2000 #text_change 02-Sep-2000

A; Status: preliminary A; Molecule type: DNA

A; Accession: C82630

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PU0001
PU0001
PU0001
Ig heavy chain V region (V1) - mouse
C;Species: Mus musculus (house mouse)
C;Dete: 17-Ju1-1992 #sequence_revision 17-Ju1-1992 #text_change 06-Jun-1997
C;Date: 190001
R;Ferguson, S.E.; Rudikoff, S.; Osborne, B.A.
J. Exp. Med. 168, 1339-1349, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Residues: 1-1000 <SIM>
A;Cross-references: GB.AE004006; GB:AE003849; NID:g9106932; PIDN:AAF84657.1; GSPDB:GN
A;Cross-reference, M.; Alvarenga, R.; Carraro, M.; Alvarenga, R.
Briones, M.R.S.; Bueno, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer
as-Neto, E.; Docena, C.; El-Oorry, H.; Facincani, A.P.; Ferreira, A.J.S.
submitted to GenBank, June 2000
A;Authors: Ferreira, V.C.A.; Ferro, J.A.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Fr
J.D.; Junquesira, M.I.; Kemper, E.L.; Kitajima, J.P.; Krieger, J.E.; Kuramee, E.E.; La
chado, M.A.; Madeira, M.H.B.N; Madeira, H.M.F.; Marino, C.L.; Marques, M.V.; Martins
A;Authors: Martins, E.M.F.; Matsukuma, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.
F.G.; Nunes, L.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmieri,
Rodrigues, V.; Rosa, A.J. de M.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sava
A;Authors: da Silva, A.C.R.; da Silva, F.R.; da Silva, A.M.; Silva Jr., W.A.; da Silva
A;Reference number; A59328
A;Cortoste a professor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
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A;Gene: XF1851
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Best Local Similarity 75.
Matches 6; Conservative
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                                                                                                                                                                  C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin F;15-100/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                      A.Title: Genetics of the phosphocholine-specific antibody response to Streptococcus pneu A.Reference number: A30534; MUID:89035545
A.Status: preliminary; nucleic acid sequence not shown; not compared with conceptual tra A.Molecule type: mRNA
A.Residues: 1-123 <CLA>
                                                                                                                                                                                                                                                                                                                                               Ig heavy chain V region (224.2Bl1) - mouse (fragment) C;Species: Mus musculus (house mouse) C;Date: 10-Feb-1989 #sequence_revision 10-Feb-1989 #t. C;Accession: D30539 R;Claflin, J.L.; Berry, J. J. Immunol. 141, 4012-4019, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Superfamily: Immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin F;15-100/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
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J. Immunol. 138, 3060-3068, 1987
A;Tille: Somatic evolution of diversity among anti-phosphocholine antibodies induced A;Reference number: A30556; MUID:87196439
A;Accession: C30556
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: mRNA
A; Residues: 1-123 <CLA>
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C;Species: Mus musculus (house mouse)
C;Date: 33-Feb-1989 #sequence_revision 23-Feb-1989 #text_change 16-Aug-1996
C;Accession: C30556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Title: Interaction and sequence diversity among T15 VH genes in CBA/J mice. A;Reference number: PU0001; MUID:89010532
A;Accession: PU0001
A;Status: translation not shown
A;Molecule type: mRNA
A;Residues: 1-101 <FER>
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;15-100/Domain: immunoglobulin homology <IMM>
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                                                                                  Similarity 7; Conserv
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                                                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                   #sequence_revision 10-Feb-1989 #text_change 16-Aug-1996
                                                                                              86.0%;
87.5%;
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87.5%;
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87.5%;
                                                                          Score 37; DB;
Pred. No. 3.3;
0; Mismatches
                                                                              0;
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Pred. No.
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Pred. No. 2.6;
0; Mismatches
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                                                                                                                       Ig heavy chain V region - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 19-Mar-1997 #sequence_revision 24-Jul-1997
C:Accession: $33402; $36385
C:R:Kettleborough, C.A.; Saldanha, J.; Ansell, K.H.;
Eur. J. Immunol. 23, 206-211, 1993
                                                                    A;Reference number: S33391; MUID:93122092
A;Accession: S33402
A;MOlernia territoria
    A; Experimental source:
                A; Cross-references: EMBL: X73019
                                       A; Molecule type: mRNA
A; Residues: 1-38 <KET>
                                                                                                                                                                                                                                                             RESULT
S33402
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C;Species: Mus musculus (house mouse)
C;Date: 31-Jul-1989 #sequence_revision 31-Jul-1989 #text_change 30-May-1997
C;Accession: D31485
R;Bedzyk, W.D.; Johnson, L.S.; Riordan, G.S.; Voss Jr., E.W.
J. Biol. Chem. 264, 1565-1569, 1989
A;Title: Comparison of variable region primary structures within an anti-flux;Reference number: A31485; MUID:89109167
A;Accession: D31485
A.Status: preliminary
A;Molecule type: protein
A;Residues: 1-36 <BED>
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
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C;Superfamily: immunoglobulin V region; immunoglobulin homology
F;34-116/Domain: immunoglobulin homology <IMM>
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A;Molecule type: mRNA
A;Residues: 1-146 <SUN>
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A;Accession: I47184
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ig heavy chain variable VDJ region - pig (fragment)
C:Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C;Accession: I47184
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I47184
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87.5%;
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                                                                                                                                                K.H.; Bendig, M.M.
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C;Genetics:
C;Genetics:
A;Introns: 30/3
A;Introns: immunoglobulin V region; immunoglobulin homology
C;Superfamily: immunoglobulin V region; immunoglobulin
C:Keywords: heterotetramer; immunoglobulin
                                                                   A;Cross-references: EMBL:X73012; NID:g295879; PIDN:CAA51498.1; PID:g939941 R;Kettleborough, C.A.; Saldanha, J.; Ansell, K.H.; Bendig, M.M. Eur. J. Immunol. 23, 206-211, 1993 Eur. J. Immunol. 23, 206-211, 1993 A;Title:, Dytimization of primers for cloning libraries of mouse immunoglob A;Reference number: S33391; MUID:93122092 A;Accession: S33396
                                                                                                                                                                                                                                                                           Ig heavy chain V region - mouse (fragment)
c;Species: Mus musculus (house mouse)
C;Date: 19-Mar-1997 #sequence_revision 29-Aug-1997
C;Accession: S36381; S33396
R;Ansell, K.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Currier, S.J.; Gallarda, J.L.; Knight, K.L. J. Immunol. 140, 1651-1659, 1988 A;Title: Partial molecular genetic map of the A;Reference number: A27606; MUID:88154464 A;Accession: A27606
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: EMBL:X73019
C;Superfamily: immunoglobulin V region;
C;Keywords: heterotetramer; immunoglobul
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                                  A; Molecule type: mRNA
A; Residues: 3-43 <KET>
                                                                                                                                                                                   A; Molecule type: mRNA
A; Residues: 1-59 < ANS>
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A; Residues: 1-59 <CUR>
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A; Residues: 1-30 < ANS>
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                   EMBL: X73012
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A;Cross-references: EMBL:X73011; NID:g295878; PIDN:CAA51497.1; PID:g939940 R;Kettleborough, C.A.; Saldanha, J.; Ansell, K.H.; Bendig, M.M. Eur. J. Immunol. 23, 206-211, 193 Eur. J. Immunol. 23, 206-211, 193 A;Title: Optimization of primers for cloning libraries of mouse immunoglobulin A;Reference number: S33391; MUID:93122092 A;Accession: S33397
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C;Species: Mus musculus (house mouse)
C;Date: 19-Mar-1997 #sequence_revision 29-Aug-1997 #text_change 23-Jul-1999
C;Accession: S36382; S33397
R;Ansell, K.H.
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A;Experimental source: strain BALB/c
C;Superfamily: immunoglobulin V region; imm
C;Keywords: heterotetramer; immunoglobulin
E;8-60/Domain: immunoglobulin homology (fra
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A; Residues: 1-33 <KET>
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A; Residues: 1-60 < ANS>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7; Conserv
                                                                                                                                                                                                                                                                 precursor V-III region (Ab21) -
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83.7%;
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Score 36;
Pred. No.
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3.3;
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Local Similarity

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RESULT 14
167527
CD3 antigen homolog - mouse (fragment)
C:Species: Mus sp. (mouse)
C:Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jan-2000
C:Accession: 167527
 R;Chies, J.A.; Lembezat, M.P.; Freitas, A.A.
Eur. J. Immunol. 24, 1657-1664, 1994
A;Title: Entry of B lymphocytes into the persistent
A;Reference number: 153392; MUID:94298870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Species: Mus sp. (mouse)
C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jan-2000
C;Accession: I67528
R;Chies, J.A.; Lembezat, M.P.; Freitas, A.A.
Eur. J. Immunol. 24, 1657-1664, 1994
A;Title: Entry of B lymphocytes into the persistent cell pool in non-immuni
A;Reference number: I53392; MUID:94298870
A; Accession:
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C;Superfamily: imn
F;11-94/Domain: in
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C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Accession: 167528
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-94 <RES>
A;Constants
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I67528
CD33 antigen homolog -
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Matches 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R; Lawler, A.M.; Lin, P.S.; Gearhart, P.J.
Proc. Natl. Acad. Sci. U.S.A. 84, 2454-2458, 1987
A; Title: Adult B-cell repertoire is biased toward.
A; Reference number: A94148; MUID:87175692
A; Accession: D25913
A; Accession: D25913
A; Molecule type: DNA
A; Residues: 1-94 CLAW>
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D25913
Ig heavy chain V region (BFL1) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 16-Aug-1988 #sequence_revision 16-Aug-1988 #text_change 16-Aug-1996
C;Accession: D25913
R;Lawler, A.M.; Lin, P.S.; Gearhart, P.J.
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Search completed: June Job time: 741 sec

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2001, 14:23:10

Вþ γQ

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A;Residues: 1-97 <MAN>
A;Residues: 1-97 <MAN>
A;Note: a "g" was inserted at the position of between 72nd and 73rd of C;Comment: This antibody is produced by Epstein-Barr virus-transformed C;Superfamily: immunoglobulin vergion; immunoglobulin homology C;Reywords: heterotetramer; immunoglobulin C;Reywords: immunoglobulin homology <IMM>F;14-97/Domain: immunoglobulin homology <IMM>F;14-97/Domain: complementarity-determining 1
F;49-66/Region: complementarity-determining 2
                                                                                                                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-97 < MAN>
                                                                                                                                                                                                                                                                                                                                               A; Accession: PH0872
                                                                                                                                                                                                                                                                                                                                                     R;Manheimer-Lory, A.; Katz, J.B.; Pillinger, M.; Ghossein, C.; Smith, A.; Diamond, B. A;Title: Molecular characteristics of antibodies bearing an anti-DNA-associated idiot
                                                                                                                                                                                                                                                                                                                                                                                                                                            1g heavy chain V region (anti-DNA, III-3R) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 16-Aug-1996
C;Accession: pH0872
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A;Molecule type: mRNA
A;Mesidues: 1-95 <RES>
A;Cross-references: GB:S71351; NID:g550039
C;Genetics: A;Gene: Ig VHX24a
C;Superfamily: immunoglobulin V region; immunoglobulin homology
F;12-95/Domain: immunoglobulin homology <IMM>
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ALIGNMENTS

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Bernard O., Gough N.M.;

"Nucleotide sequence of immunoglobulin heavy chain joining segme
T between translocated VH and mu constant regions genes.";

Proc. Natl. Acad. Sci. U.S.A. 77:3630-3634(1980).

C PROC. Natl. Acad. Sci. U.S.A. 77:3630-3634(1980).

C PREGION WAS ALSO DETERMINED & DIFFERS IN ONLY 3 POSITIONS FRO.

C CORRESPONDING PORTION OF THE MOUSE MOPC 104E MU CHAIN.

R PIR; A02074; MHMS76.

R InterPro; IPR003006; -

R PIGN. PF00047; 19; 1.

Immunoglobulin V region.

T NON_TER 1.
SEQUENCE.
MEDLINE-78158406; PubMed-417344;
Vrana M., Rudikoff S., Potter M.;
                                                                                                        Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                            HV27_MOUSE STANDARD: PRT; 113 AA. PV27_MOUSE STANDARD: PRT; 113 AA. PV27_96; 21-JUL-1986 (Rel. 01, Created) 21-JUL-1986 (Rel. 01, Last sequence update) 15-JUL-1999 (Rel. 38, Last annotation update)
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
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21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
IG HEAVY CHAIN V-III REGION HPC76 (FRAGMENT).
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12304 MW;
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; Murinae; Mus
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HYZB_MOUSE
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AC P01797;
DT 21-JUL-1986
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DE IG HEAVY CHF
OS MUS MUSCULS
OC EUKBATYOTA; N
OC MAMMALIA; EL
OX NCBL_TAXID=1
RN [1]
RP SEQUENCE.
RX YEARA M., RR
RT "SEQUENCE VEAR PTOCEINS.";
RL PTOC. Natl.
CC -1- MISCELL;
CC -1- MISCELL;
CC BINNS IN
DR FIR; B93818,
DR FIR; BPCR F
                               HV29_MOUSE STANDARD; PRT; 13 AA.
p01798;
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
16 HEAVY CHAIN V-III REGION E109.
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebra Mammalla; Eutheria; Rodentia; Sciurognathi; Mur:
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Best Local S
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Interpro; IPR003006; -...
Pfam; PF00047; 19; 1
Immunoglobulin V region.
22 98
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Vrana M., Rudikoff S., Potter M.,
"Sequence variation among heavy chains from inulin-binding myeloma
proteins.";
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InterPro; IPR003006;
Pfam; PF00047; 1g; 1 1
Immunoglobulin V region
DISULFID 22 98
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proc. Natl. Acad. Sci. U.S.A.
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21-JUL-1986 (Rel. 01, Last sequence up
15-JUL-1999 (Rel. 38, Last annotation
IG HEAVY CHAIN V-III REGION U61
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MISCELLANEOUS: THIS CHAIN WAS ISOLATED FROM A MYELOMA PROTEIN THAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BINDS INULIN
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113
113 AA;
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12675 MW;
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87.5%;
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87.5%;
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CHAIN WAS ISOLATED FROM A MYELOMA PROTEIN THAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 36;
Pred. No.
0; Mismatc
                            Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
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Pred. No. 3.3;
0; Mismatches
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HV31_MOUSE STANDARD
ID HV31_MOUSE STANDARD
AC P01800;
DT 21-JUL-1986 (Rel. 01, C
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Matches 7; Conservative
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Pfam; PF00047; ig; 1.
Immunoglobulin V region.
DISULFID 22 98
NON_TER 13 113
SEQUENCE 113 AA; 12675 M
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Vrana M., Rudikoff S., Potter M.;
"Heavy-chain variable-region sequence
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Pfam; PF00047; ig; 1.
Immunoglobulin V region.
DISULFID 22 98
NON_TER 113 113
SEQUENCE 113 AA; 12647
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-!- MISCELLANEOUS: THIS CHAIN WAS ISOLATED FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TV30_MOUSE STANDARD; PRT; 113 AA. p01799; p01799; 21-JUL-1986 (Rel. 01, Created) 21-JUL-1986 (Rel. 01, Last sequence update) 15-JUL-1999 (Rel. 38, Last annotation update) 15-JUL-1999 (Rel. 38, Last annotation update) IG HEAVY CHAIN V-III REGION ABE-47N. Mus musculus (Mouse). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; ENCBI_TaxID=10090;
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Proc. Natl. Acad. Sci. U.S.A. 75;1957-1961(1978).
-!- MISCELLANEOUS: THIS CHAIN WAS ISOLATED FROM A MYELOMA PROTEIN THAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDITINE-78158406; PubMed-417344;
Vrana M., Rudikoff S., Potter M.;
"Sequence variation among heavy chains from
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InterPro; IPR003006; -.
Pfam; PF00047; 19; 1.
Immunoglobulin V region.
DISULFID 22 9BY
NON_TER 113 113
SEQUENCE 113 AA; 12691 MW;
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InterPro; IPR003006; -.
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Immunoglobulin V region.
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Rudikoff S., Potter M.;
"Immunoglobulin heavy chains from anti-inulin
evidence for a new heavy chain joining segment
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Rudikoff S., Potter M.;
"Immunoglobulin heavy chains from anti-inulin myeloma evidence for a new heavy chain joining segment.";
J. Immunol. 127:191-194(1981).
                                                                                                                                                                                                                                                                                                                                           J. Immunol. 127:191-194(1981).
-!- MISCELLANEOUS: THIS CHAIN WAS ISOLATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-J1803;
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequ
15-JUL-1999 (Rel. 38, Last anno
IG HEAVY CHAIN V REGION AMPC1.
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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Mammalia; Eutheria; Rodentia;
NCBI_TaxID=10090;
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GGGLVQPG
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01, Last sequence up
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Eukaryota; Metazoa; Che
Mammalia; Eutheria; Rou
NCBI_TaxID=10090;
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Pfam; PF00047; ig; 1.
Immunoglobulin V region.
22 98
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J. Immunol. 128:302-307(1982).
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Johnson N., Slankard J., Paul L.,
"The complete V domain amino acid
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21-JUL-1986 (Rel. 01, Last sequence up
15-JUL-1999 (Rel. 38, Last annotation
IG HEAVY CHAIN V-III REGION W3082.
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J. Immunol. 128:302-307(1982).
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15-JUL-1999 (Rel. 38, Last annotation
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Mammalia; Eutheria;
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Rodentia;
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Sciurognathi; Muridae;
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                                                        core 36; DB red. No. 3.4; Mismatches
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RESULT 10
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AC P01765
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DE IG HEA
OS HOMO S
OC Mammal
OX MCBI_T
RN [1]
RP SEQUEN
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PIR; A02048; HHUTL.

InterPro; IPR003006; -.

Pfam; PF00047; 19; 1.

Immunoglobulin V region.

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                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.

MEDILINE-82059449; PubMed-6795591;
Ollo R., Auffray C., Sikorav J.-L., Re
"Mouse heavy chain variable regions: r
germ-line VH gene segment.";
Nucleic Acids Res. 9:4099-4109(1981).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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Wang A.-C., Wang I.Y., Endenberg H.H.;
"Immunoglobulin structure and genetics. Identity between variable regions of a mu and a gamma2 chain.";
J. Biol. Chem. 252:7192-7199(1977).
-I- MISCELLANEOUS: THE SEQUENCES OF THE V REGIONS OF THE HEAVY CHAINS OF IGM AND IGG2 ISOLATED FROM A SINGLE PATIENT WITH BICLONAL GAMMOPATHY ARE IDENTICAL. THEIR LIGHT CHAINS ARE APPARENTLY ALSO
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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21-JUL-1986 (Rel. 01, Last sequence up
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IG HEAVY CHAIN V-III REGION TIL.
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V00774; CAA24152.1;
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115 AA;
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Best Local S
Matches 7
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               Eukaryota; Metazoa; Mammalia; Eutheria; NCBI_TaxID=10090;
                                              Mus musculus (Mouse)
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P01779;
21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence up
15-JUL-1999 (Rel. 38, Last annotation
IG HEAVY CHAIN V-III REGION TUR.
                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=74142702; PubMed=4522793; Capra J.D., Kehoe J.M.;
                                                                                                                                                                                                                                                                                                                                         hypervariable regions.";
Proc. Natl. Acad. Sci. U
                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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Pfam; PF00047; 1g; 1.
Immunoglobulin V region; Signal.
SIGNAL 1 18
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HSSP; P01810; 2FBJ.
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THIS CHAIN WAS ISOLATED FROM
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Rodentia;
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Sciurognathi; Muridae; Murinae; Mus
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Pred. No. 3:4;
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Best Local S
Matches 7
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IR; A0204/,
InterPro; IPRO030vv,
Pfam; PF00047; 1g; 1.
Immunoglobulin V region; S'
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HSSP; P001789; 2MCP.
InterPro; IPR003006; -.
Pfam; PF00047; 19; 1.
Immunoglobulin V region.
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SEQUENCE 117 AA; 12975
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SEQUENCE
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RADDITE-81101090; RADDITES T.H.;
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J. Biol. Chem. 254:11418-11430(1979),

-I- MISCELLANEOUS: THIS ALPHA CHAIN WAS ISOLATED FROM A MYELOMA PROTEIN THAT CONTAINS ONE LIGHT AND ONE HEAVY CHAIN PER MOLECULE, LINKED BY A DISULFIDE BOND. IN CONTRAST, NORMAL MOUSE IGA MOLECULES CONTAIN TWO LIGHT AND TWO HEAVY CHAINS AND LACK A LIGHT-HEAVY CHAIN DISULFIDE BOND.
                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; J00236; AAA53516.1; EMBL; M35415; AAA58735.1; PIR; A02047; H3HU26.
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"Structure and multiplicity of genes for the human heavy chain variable region.";
Proc. Natl. Acad. Sci. U.S.A. 77:6561-6565(1980).
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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Local Similarity
nes 7; Conserv
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                                       Score 36; DB Pred. No. 3.4;
                                                                                                                                                                                                                                           IG HEAVY CHAIN V-III REGION VH26
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                                                                                                                                                                       E826733F1A3CB0F1 CRC64;
   Mismatches
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   Indels
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GGGLVQDG 8

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RESULT 15
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Best Local (
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Pfam; PF00047; 19; 1
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SEQUENCE 117 An
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P01776;
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Capra J.D., Kehoe J.M.;
"Variable region sequences of five human immunoglobulin heavy chains of the VH3 subgroup: definitive identification of four heavy chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hypervariable regions.";
Proc. Natl. Acad. Sci. U.S.A. 71:845-848(1974).
-!- MISCELLANEOUS: THIS CHAIN WAS ISOLATED FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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PIR; A02059; G1HUWS.
HSSP; P01772; 2IG2.
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21-JUL-1986 (Rel. 01, Last sequents-JUL-1996 (Rel. 38, Last annot IG HEAVY.CHAIN V-III REGION WAS.
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Gapop 10.0 , Gapext 0.5
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O9pcdO xyleila fas
Q9qv16 rattus sp.
Q9qv16 rattus sp.
Q9ulb6 homo sapien
Q9u191 homo sapien
Q9u192 homo sapien
Q9u192 homo sapien
Q9u55 streptomyce
Q84994 burkholderi
Q95848 homo sapien
P9693 mycobacteri
Q95403 burkholderi
Q95640 burkholderi
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Q86146 burkholderi
Q86147 rhodococcus
Q86111 archaeoglob
Q91004 streptomyce
Q55136 mus musculu
Q43129 aspergillus
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074052 cenarchaeum Q9khw1 rhizobium m					strep			Q9u171 homo sapien	homo	Q9ul90 homo sapien			Q9zle8 helicobacte		Q55856 synechocyst	P70944 burkholderi	Q9zfk3 burkholderi .	Q9rqe9 burkholderi	Q9s638 burkholderi	Q9s639 burkholderi	Q9wwt1 burkholderi	Q9rxz3 deinococcus	Q9r9b1 burkholderi	O80841 arabidopsis

ALIGNMENTS

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RESULT
Q9ULB6
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INTERPRO; IPR000209;
INTERPRO; IPR000209;
INTERPRO; IPR0002055;
R PFAM; PF00082; Peptidase_S8; 2.
R PFINTS; PR00723; SUBTILISIN.
R PRINTS; PR01217; PRICHETERSN.
R PROSITE; PS00136; SUBTILASE_ASP; UNKNOWN_1.
R PROSITE; PS00138; SUBTILASE_SER; UNKNOWN_1.
R PROSITE; PS00138; SUBTILASE_SER; UNKNOWN_1.
R PROSITE; PS00138; SUBTILASE_SER; UNKNOWN_1.
R PROSITE; PS00639; THIOL_PROTEASE_HIS; UNKNOWN_1.
SEQUENCE 1000 AA; 105429 MW; 113491226F8DE26C CRC64;
                                                                                                                                                                                                                                                           Q9ULB6 PRELIMINARY; PRT; 95 AA.
Q9ULB6;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-OCT-2000 (TrEMBLrel. 15, Last annotation update)
IMUNOGLOBULIN HEAVY CHAIN (FRACMENT).
SEQUENCE FROM N.A. Tange Y., Kayano H.;
                                                                                                                     Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
NCBI_TaxID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Serum prolactin binding protein (PRL-BP) of human and identified as IgG.", III, Sci. Vie 317:293-298(1994).
HSSP; P01789; IMCP.
SEQUENCE 15 AA; 1469 MW; 35ED2512FF3FA369 CRC64;
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"The genome sequence of the pla
mature 406:151-157(2000),
EMBL; AE004006; AAF84657.1; -.
INTERPRO; IPRO00169; -.
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e sequence of the plant pathogen Xylella fastidiosa.";
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87.5%;
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Best Local Similarity 87:
Matches 7; Conservative
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MEDLINE-98277139; PubMed-9614934;
MEDLINE-98277139; PubMed-9614934;
Titu B., Van der Merwe P.L.,
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Q9UL72;
Q9UL72;
Q1-MAY-2000
Q1-MAY-2000
Q1-OCT-2000
                                                                                                                      Homo sapiens (Human)
Eukaryota; Metazoa;
Mammalia; Eutheria;
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Best Local (
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIABLE
                                                                                               NCBI_TaxID=9606;
[1]
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NON_TER
SEQUENCE
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MEDLINE-98277139; PubMed-9614934;
MEDLINE-98277139; PubMed P.L., Kalis N.N.,
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01-MAY-2000
01-MAY-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Myosin-reactive autoantibodies in rheumatic carditis and normal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MYOSIN REPORT (Human).
Homo sapiens (Human).
Chordata;
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
MYOSIN-REACTIVE IMMUNOGLOBULIN HEAVY CHAIN VARIABLE
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NON_TER 1 1
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HSSP; P01772; 2FB4.
INTERPRO; IPR003006; -.
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Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.
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                                                                                                    s (Human).

Metazoa; Chordata; C

Metazoa; Primates; (
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10527 MW;
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87.5%;
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87.5%;
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                                                                                                        Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 36; DB
Pred. No. 16;
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01-MAY-2000
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Clin. Im
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
STRAIN-TU 1892;
MEDLINE-99203506; PubMed-10103039;
Chen S., von Bamberg D., Hale V., Breuer M., Ha Floss H.G., Reynolds K.A., Leistner E.;
"Biosynthesis of ansatrienin (mycotrienin) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NON_TER
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HSSP; P01772; 2FB4
                                       Bacteria; Proteobacteria;
                                                         Burkholderia pseudomallei
                                                                                                                                                         084994;
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Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
Actinomycetales; Streptomyclneae; Streptomycetaceae; St
NCBI_TaxID-42684;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Identification and analysis of two separate biosynthetic in Streptomyces collinus Tu 1892."; Eur. J. Biochem. 261:98-107(1999). EMBL; AF131877; AAD31831.1;
 NCBI_TaxID=28450;
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Myosin-reactive autoantibodies
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nes 7; Conserv
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SEQUENCE
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01-MAY-1999 (TrEMBLrel. 10, Created)
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01-MAY-1999 (TrEMBLrel. 10, Last ann
HYPOTHETICAL 31.5 KDA PROTEIN.
HOMO sapiens (Human)
                                                                                    Actinomycetales; Corynebacterineae;
NCBI_TaxID=1773;
[1]
                                                                                                                                                                                                                                                 01-MAY-1997 (TrEMBLrel. 03, Cr
01-MAY-1997 (TrEMBLrel. 03, La
01-JUN-2000 (TrEMBLrel. 14, La
01-JUN-2000 (TrEMBLrel. 14, La
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J. Med. Microbiol. 47:689-694(1998).
EMBL; AF030241; AAC27443.1; -.
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"Flagellin gene variation between clinical a
of Burkholderia pseudomallei contrasts with
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SEQUENCE FROM N.A.
STRAIN=E956;
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Mammalia; Eutheria;
MEDLINE=98295987; PubMed=9634230;
                          STRAIN-H37RV
                                                    SEQUENCE FROM N.A.
                                                                                                                                                                Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
                                                                                                                                                                                                Mycobacterium tuberculosis
                                                                                                                                                                                                                             RV0650 OR MTCY20H10.31
                                                                                                                                                                                                                                                                                                                                                                         P96939;
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7; Conserv
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Primates;
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03, Last sequence up
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37;
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Query Match
Best Local S
Matches 7
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PFAM; PF00700; Flagellin_C; 1
PRINTS; PR00207; FLAGELLIN.
NON_TER
382
SEQUENCE 382 AA; 38690 MW;
                                               Q9S640;
Q9S640;
01-MAY-2000
01-MAY-2000
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Best Local
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Q1-NOV-1999 (Tremblrel
Q1-NOV-1999 (Tremblrel
Q1-NAY-2000 (Tremblrel
FLAGELLIN (FRAGMENT))
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wajanarogana S., Tungpradabkul S., Panyim S.;
"Variation of flagellin genes between virulent and non-strains of Burkholderia pseudomallei.";
Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases
EMBL; AF078155; AAD24680.1;
INTERPRO; IPR001029;
INTERPRO; IPR001492;
INTERPRO; IPR001492;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. STRAIN-E 276;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Burkholderia pseudomallei (Pseudomonas pseudomallei).
Bacteria; Proteobacteria; beta subdivision; Burkholderia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=28450;
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"Deciphering the biology of Mycobacterium tuberculosis from the Nature 2021877.54//1006."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hypothetical protein.
SEQUENCE 302 AA; 29269 MW; 6E4E45D4009150FE CRC64;
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PROSITE; PS01125; ROK; UNKNOWN_1.
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EMBL; Z92772; CABO7107.1; -.
TUBERCULIST; Rv0650; -.
INTERPRO; IPR000600; -.
DEAM. DECO(1000)
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                                                                                                                                                                                                                                                                          GGGLVQTG 177
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                                            (TrEMBLrel.
                                                                                                                               PRELIMINARY;
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(TrEMBLrel. 12, Last sequence update)
(TrEMBLrel. 13, Last annotation update)
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87.5%;
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                                                                                                                                                                                                                                                                                                                                                                           0;
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Pred. No. 46;
0; Mismatches
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                                                                                                                            PRT;
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een virulent and non-virulent
                                                                                                                         382
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           Q9Z3A8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Brett P.J., Woods D.E.; "Vaccine Strategies for Immunoprophylaxis Against Melioidosis."; Submitted (AUG-1998) to the EMBL/GenBank/DDBJ databases.

EMBL; AF081500; AAC31966.1; -.
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01-NOV-1998
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Burkholderia.
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Burkholderia thailandensis.
Proteobacteria; beta
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"Variation of flagellin genes between virulent and non-virulent strains of Burkholderia pseudomallei.";
submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AF078153; AAD24678.1;
INTERPRO; IPR001029;
INTERPRO; IPR001029;
INTERPRO; IPR00192;
PFAM; PF00700; Flagellin_N; 1.
PFAM; PF00700; Flagellin_C; 1.
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FLAGELLIN (FRAGWENT)
Burkholderia pseudomallei
Pseudomonas pseudomallei
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87.5%;
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beta subdivision; Burkholderia group;
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MEDLINE-98155136; pubMed-9495748;
Hales B.A., Morgan J.A.W., Hart C.A., Winstanley
"Variation in flagellin genes and proteins of Bur
J. Bacteriol. 180:1110-1118(1998).
EMBL; AF011370; AAC38199.1; -.
INTERPRO; IPR001029; -.
INTERPRO; IPR001029; -.
INTERPRO; IPR001192; -.
PFAM; PF00700; Flagellin_N; 1.
PFAM; PF00700; Flagellin_C: 1.
PRINTS; PR00207; FLAGELIN.
PRINTS; PR00207; FLAGELLIN.
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STRAIN-DMS 3027, DMS 2555;

STRAIN-DMS 3027, DMS 2555;

Tungpradabkul S., Wajanarogana S., Tunpiboonsak S.,

"PCR-restriction endonuclease of the flagellin sequing the strain of Burkholderia pseudomaliei and Burfrom clinical isolates.";

MOI. Cell. Probes 0:0-0(1999).

EMBL; AF080250; AAD12053.1; -.

EMBL; AF080259; AAD12053.1; -.

INTERERG; IPR001229; -.
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O68143;
O1-AUG-1998 (TrEMBLrel. 07, C
O1-AUG-1998 (TrEMBLrel. 07, L
O1-JUN-2000 (TrEMBLrel. 14, L
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PIAM; PF00669; Flagellin_N;
PFAM; PF007700; Flagellin_C;
PRINTS; PR00207; FLAGELLIN
NON_TER 383 383
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Burkholderia cepacia (Pseudomonas cepacia).
Bacteria; Proteobacteria; beta subdivision;
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GGGLVQDG 8
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                                                                  Similarity 87.17; Conservative
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MEDLINE=95138028; PubMed=7836301;
Nagy I., Schoofs G., Compernolle
                                                                                                                                                                                                                                                                        STRAIN-NI86/21;
MEDLINE-94259308; PubMed-8200543;
de Mot R., Nagy I., Schoofs G., Vanderleyden
de Sequences of the cobalamin biosynthetic gene
from Rhodococcus sp. NI86/21.";
Gene 143:91-93(1994).
                                                                                                                                                                                                                                                                                                                                                               Rhodococcus sp.
Bacteria; Firmicutes;
Actinomycetales; Coryr
                                                                                                                                                                                   "Degradation of the thiocarbamate herbicide EPTC (S-ethyl dipropylcarbamothioate) and biosafening by Rhodococcus sp. strain N186/21 involve an inducible cytochrome P-450 system and aldehyde
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q53137
                                                                                                                                    SEQUENCE
                                                                                                                                                     J. Bacteriol. 177:676-687(1995).
EMBL; L21196; AAC37129.1; -.
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                                                                                                                                                                                                                 de Mot R.;
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                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                              INTERPRO;
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completed:
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                                                          | GGGLVQDG
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                                                                                     Conservative
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                                                                                                                                     A,
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75.0%;
         2001,
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14,
         14:29:42
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                                                                                              Score 36;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Created)
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                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                                                                                                 Nocardiaceae; Rhodococcus.
                                                                                                                                                                                                                          Proost P., Vanderleyden
                                                                                                                                                                                                                                                                                                                                                                                                                                                      447
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71;
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                                                                                     1.
                                                                                                      Length 447;
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score
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seq length:
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1: /ggn2_6/ptodata/2/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*

5: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*
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       185757 segs, 19210857 residues
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                    US-08-318-157B-2
US-08-331-39BA-66
US-08-652-558-42
US-08-331-397B-66
US-08-331-397B-66
US-08-331-397B-55
US-08-401-908-14
US-08-331-397B-55
US-08-401-908-14
US-08-659-931A-2
US-08-659-931A-2
US-08-659-931A-2
US-08-467-282B-80
US-08-471-282A-80
US-08-467-710C-119
US-08-468-739C-819
US-08-466-710C-119
US-08-466-710C-119
US-08-466-710C-119
US-08-466-710C-119
US-08-466-710C-119
US-08-466-710C-119
US-08-466-710C-119
US-08-468-739C-119
US-08-468-739C-119
US-08-468-739C-119
US-08-468-739C-119
US-08-468-739C-119
US-08-468-739C-119
US-08-468-739C-119
US-08-468-739C-75
US-08-362-780-75
US-08-362-780-79
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Sequence 2, Appli
Sequence 66, Appl
Sequence 65, Appl
Sequence 65, Appl
Sequence 55, Appl
Sequence 54, Appl
Sequence 54, Appl
Sequence 54, Appl
Sequence 2, Appli
Sequence 2, Appli
Sequence 80, Appl
Sequence 119, Appl
Sequence 119, Appl
Sequence 119, Appl
Sequence 119, Appl
Sequence 7, Appli
Sequence 92, Appl
Sequence 92, Appl
Sequence 17, Appli
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Patent No. 5874540
GENERAL INFORMATION:
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US-08-318-157B-2
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Result

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ALIGNMENTS	US-08-211-202-134	US-08-545-809A-129	US-08-211-202-117	PCT-US93-10555-3	US-08-428-197-3	US:07-942-245-21	US-07-942-245-17	PCT-US93-10555-4	US-08-428-197-4	PCT-US93-10555-48	US-08-665-202-31	US-08-428-197-48	US-07-942-245-37	US-08-211-202-116	US-08-765-783A-105	US-08-497-312-21	US-08-053-451B-126	US-08-162-102C-36
	Sequence 134, App	Sequence 129, App	Sequence 117, App	Sequence 3, Appli	Sequence 3, Appli	Sequence 21, Appl	Sequence 17, Appl	Sequence 4, Appli	Sequence 4, Appli	Sequence 48, Appl	Sequence 31, Appl	Sequence 48, Appl	Sequence 37, Appl	Sequence 116, App	Sequence 105, App	Sequence 21, Appl	-	Sequence 36, Appl

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TELEFAX: (202)672-5399

TELEX: 904136

INFORMATION FOR SEQ ID NO: 2

SEQUENCE CHARACTERISTICS:
LENGTH: 119 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-318-157B-2
                                                       Query Match
Best Local Similarity
"hes 7; Conserv?"
                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/318,157B FILING DATE: 05-OCT-1994
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: SAXE, Bernhard D.
REGISTRATION NUMBER: 28,665
REFERENCE/DOCKET NUMBER: 18733/464
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
TELEFAX: (202)672-5309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 58
CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 3000 K Street, N.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: HANSEN, HANS J.

APPLICANT: ARMOUR, KALHRYN L.

TITLE OF INVENTION: CDR-GRAFTED. TYPE III ANTI-CEA HUMANIZED
TITLE OF INVENTION: MOUSE MONOCLONAL ANTIBODIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Washington STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                    1 GGGLVQDG
8 GGGLVQSG 15
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amino acid
DGY: linear
                                                                      Conservative
                                                                                       86.0%;
87.5%;
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Pred. No. 8.
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                                                                                                            DB
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                                                                                                        Length 119;
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US-08-652-558-42
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                                                                         Sequence 42, Application US/08652558 Patent No. 5861155 GENERAL INFORMATION:
                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (415) 543-50 ID NO:
                         APPLICANT: LIN, AUGU
TITLE OF INVENTION:
TITLE OF INVENTION:
CORRESPONDENCE ADDRESS
                NUMBER OF SEQUENCES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-331-398A-66
                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 07/767,331
FILING DATE: 30-SEP-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/596,289
FILING DATE: 12-OCT-1990
ATTORREY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING LONG 435
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PARTON NUMBER: US 07/767,331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
                                                                                                                                                                                       1 GGGLVQDG 8
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8 GGGLVQPG 15
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NUMBER OF SEQUENCES: 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                        Local Similarity
les 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Brinl APPLICANT: Pai,
                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 38,498 REFERENCE/DOCKET NUMBER: 01
                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/331,398A FILING DATE: 28-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Townsend and Townsend and Crew STREET: One Market Plaza, Steuart Street Plaza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hunter,
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FitzGerald, David
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                                                           AUGUSTINE YEE-THARN
             THEREOF
: 52
                                                                                                                                                                                                                                                                  83.78;
87.58;
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                                     HUMANIZED ANTIBODIES AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                               66:
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                                                                                                                                                                                                                                                                  Score 36;
Pred. No. 1
                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                               DB 1;
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RESULT 4
US-08-331-397B-66
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Best Local Similarity
Thes 7; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 66,
                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
FILING LALL.
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/767,331
APPLICATION NUMBER: 30-SEP-1991
                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/652,558
FILING DATE: JUNE 6, 1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/IB94/00387
FILING DATE: NOVEMBER 21, 1994
ATTORNEY/ACENT INFORMATION:
NAME: YANKWICH, LEON R.
REGISTRATION NUMBER: 95,497-L
TELECOMMUNICATION INFORMATION:
TETFERENCE/DOCKET NUMBER: 95,497-L
TETFERENCE/DOCKET NUMBER: 95,497-L
TETFERENCE/DOCKET NUMBER: 95,497-L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 617-345-9111
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch diskette, 1.4 mb storage
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WordPerfect 6.1
CURRENT APPLICATION DATA:
                                                                                  APPLICATION NUMBER: US/08/331,397B
FILING DATE: 28-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                              ADDRESSEE: Townsend and Townsend and Crew STREET: One Market Plaza, Steuart Street Plaza CITY: San Francisco
                                                                                                                                                                                                                        COUNTRY: USA
ZIP: 94105-1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 GGGLVQPG 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: BANNER & WITCOFF
STREET: 75 STATE STREET, 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                    5981726
                                                                                                                                                                                                                                                      California
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Specific
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 36;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                       and Mutationally Stabilized Tumor-
Antibody Fragments, Fusion Proteins, and Uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23RD FLOOR
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Best Local Similarity 87.5%;
Matches 7; Conservative
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, volume Release Re
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LENGTH: 15 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 28-OCT-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                         APPLICATION NUMBER: US 0 FILING DATE: 12-OCT-1990 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/767,331 FILING DATE: 30-SEP-1991 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
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APPLICATION NUMBER: US 07/596,289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Tumor-Specific Antibody Fragments, TITLE OF INVENTION: Fusion Proteins, and Uses Thereof
TORNEY/AGEN.
NAME: Webber, Ellen L.
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 015280-126140US
RELECOMMUNICATION INFORMATION:
(415) 576-0200
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STRANDEDNESS:
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 08/331,398 FILING DATE: 28-OCT-1994
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FitzGerald, David J.
Brinkmann, Ulrich
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12-OCT-1990
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Pred. No.
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Best Local Similarity
Watches 7; Conserve
; TOPOLOGY: 1; MOLECULE TYPE: US-08-331-398A-55
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                                                                                                                        TELEFAX: (415) 543-50 INFORMATION FOR SEQ ID NO:
                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 18 amino acids
TYPE: amino acid
                                                                                                                                                                       NAME: HUNTER, TOM
REGISTRATION NUMBER: 38,498
REFERENCE/DOCKET NUMBER: 015280-126110US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 07/767,331
FILING DATE: 30-SEP-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/596,289
FILING DATE: 12-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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STATE: California
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                                                 STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/331,398A FILING DATE: 28-OCT-1994
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                                                                                                                                                      TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
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Willingham, Mark
FitzGerald, David
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US-08-331-397B-55
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Best Local Similarity
Thes 7; Conserv
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; ORIGINAL SOURCE:
US-08-401-908-14
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US-08-401-908-14
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                                                                        Sequence 55, App
Patent No. 59817
                                                           GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Warren M. Cheek, Jr. REGISTRATION NUMBER: 33,367 REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                             APPLICANT:
                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 536 PRIOR APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE:
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     ICANT: Pastan,
ICANT: Benhar,
E OF INVENTION:
E OF INVENTION:
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                                                                                     Application US/08331397B
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805 Fifteenth Street, N.W., #700
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ZENTION: A DNA WHICH CODES FOR THE VARIABLE REGION OF DENTION: ANTIBODY
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: heavy chain of C179
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Chimeric and Mutationally Stabilized Tumor-
Specific Antibody Fragments, Fusion Proteins,
                                                                                                                                                                                                                        83.7%;
87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/08/401,908
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                                                                                                                                                                                                           0,
                                                                                                                                                                                                                       Score 36;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 1.7;
0; Mismatches
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                                                                                                                                                                                                                                  Length 18;
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 and Uses
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                                                                                                                                                                                                                                                                                         Sequence 54, Application US/08759804A Patent No. 5990296
                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 7; Conserv
                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 01
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 543-9600
TELEPAX: (415) 543-9043
INFORMATION FOR SEQ ID NO: 55:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07,
FILING DATE: 30-SEP-1991
PRIOR APPLICATION DATA:
APPLICATION UMBER: US 07,
FILING DATE: 12-OCT-1990
ATTORNEY/AGENT INFORMATION:
NAME: TOTAL
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                     NUMBER OF SEQUENCES: 68
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and
                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/767,331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: 1: MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew
STREET: One Market Plaza, Steuart Street Plaza
                                                                                        ADDRESSEE: Townsc...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
                                                                              CITY: San Francisco
STATE: California
                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: One Market P
CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE:
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                                               94111-3834
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                                                                                                                                                                                                                             Willingham, Mark
FitzGerald, Davi
                                                                USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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SYSTEM: PC-DOS/MS-DOS
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12-OCT-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-OCT-1994
                                                                                                                                                                 Fusion
                                                                                                                                                              Tumor-Specific Antibody Fragments Fusion Proteins, and Uses Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                      83.7%;
                                                                                                                                                                                                               Ulrich
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                                                                                                                                                                                                                             David J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38,498
                                                                                                    Townsend and Crew LLP Center, Eighth Floor
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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CURRENT APPLICATION DATA:

OPERATING SYSTEM: SOFTWARE: Patentl

PatentIn

PC-DOS/MS-DOS

Release #1.0, Version #1.30

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (415) 576-020
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 5
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: SUB-
TITLE OF INVENTION: PHY:
TITLE OF INVENTION: MAMM
TITLE OF INVENTION: MAMM
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:

NAME: Weber, Ellen L.

REGISTRATION NUMBER: 32,762

REGISTRATION NUMBER: 015280-126140US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415)_576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 28-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 07/767,331
FILING DATE: 30-SEP-1991
PRIOR APPLICATION UNMBER: US 07/596,289
FILING DATE: 12-OCT-1990
REGISTRATION NUMBER: 30,764
REFERENCE/DOCKET NUMBER: A-6901
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 293-7060
                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
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PRIOR APPLICATION NUMBER: US 08/331,398
                                                                    ATTORNEY/AGENT INFORMATION: NAME: KIT, Gordon
                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                     STREET: 2100 Penns
CITY: Washington,
                                                                                                        APPLICATION NUMBER: US/08/859,931A FILING DATE: 21 MAY 1997 CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                         COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                            STATE: D.C.
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                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
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    SUGHRUE, MION, ZINN, MACPEAK & SEAS
    Pennsylvania Avenue, N.W., Suite 800
    Shington, D.C.

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87.5%;
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Query Match
Best Local Similarity
Thes 7; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 113, Application US/08053451B Patent No. 5955584
Query Match 83. Best Local Similarity 87. Matches 7; Conservative
                                                                                                                                                                                                                                                                    TELEFAX: 415-854-3694
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (202) 293-7860 INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Halluin, Albert P.
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 76
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/053,451B
FILING DATE: 26-APR-1993
CLASSIFICATION: 424
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
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                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS
LENGTH: 20 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                           NAME/KEY: modified-site LOCATION: 2..3
OTHER INFORMATION: /note OTHER INFORMATION: Gln*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 1155 A
CITY: New York
STATE: New Yor
                                                                                                                                                                                       STRANDEDNESS:
TOPOLOGY: un)
                                                                                                                                                                                                                                                                                                                TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Pennie a Lumericas STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
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                                                                                                                                                                                         unknown
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NO
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                                                                                                                                                                        protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Floppy disk
                                                                                                                                                                                                         unknown
              83.7%;
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87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   , Emanuel
ATHEROSCLEROTIC PLAQUE SPECIFIC
ANTIGENS, ANTIBODIES THERETO, AND USES THEREOF
                                                                                           /note= "Where Xaa = k or q = Lys Gln"
Score 36; DB Pred. No. 1.9; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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Pred. No.
                DB
1.9;
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                             Length 20;
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Gaps

GGGLVQDG

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RESULT 13
US-08-467-282B-80
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           Sequence 80, Application US/08467282B Patent No. 5800988 GENERAL INFORMATION:
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US-08-471-780C-80
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                                                                                                                                                                                                                  Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
ORIGINAL SOURCE:
 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FR 92402326.0 FILING DATE: 21-AUG-1992 PRIOR APPLICATION DATA: APPLICATION NUMBER: FR 93401310.3 FILING DATE: 21-MAY-1993
                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: UFILING DATE: 06-JUN-1
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 21-MAY-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Casterman, cec.
APPLICANT: Hamers, Raymond
TITLE OF INVENTION: Immuno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                      Local Similarity
les 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Potter, Jane E.R.
REGISTRATION NUMBER: 33,332
REFERENCE/DOCKET NUMBER: 04
                                                                                                                                                                                                                                                                                                                                        LENGTH: 26 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INSULATION NUMBER: US U,
APPLICATION NUMBER: US U,
APPLICATION NUMBER: FR 92402326.0
                                                                                                                                                     1 GGGLVQDG 8
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                                                                                                                           8 GGGLVQPG 15
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OPERATING SYSTEM: PC-DOS/MS-DOS
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Casterman, Cecile
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1300 I Street, N.W.
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                                                                                                                                                                                                                                                                                                                                                                                                                                  202-408-4000
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Pred. No. 2
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                                                                                                                                                                                                           Length 26;
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RESULT 14
US-08-471-282A-80
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APPLICATION NUMBER: US 08/106,944
FILING DATE: 17-AUG-1993
APPLICATION NUMBER: FR 92402326.0
FILING DATE: 21-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 93401310.3
ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                     STREET: 1300 I SLI
CITY: Washington
STATE: D.C.
COUNTRY: USA
20005-3315
                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & Dunner
STREET: 1300 I Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 202-408-4400 INFORMATION FOR SEQ ID NO:
                                                                                                                                       APPLICANT: Casterman, Cecile
APPLICANT: Hamers, Raymond
TITLE OF INVENTION: Immunoglo
NUMBER OF SEQUENCES: 130
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ORIGINAL SOURCE:
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LENGTH: 26 amino acids
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ATTORNEY/AGENT INFORMATION:
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TITLE OF INVENTION: Immuno;
NUMBER OF SEQUENCES: 130
CORRESPONDENCE ADDRESS:
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MEDIUM TYPE: Floppy
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8 GGGLVQPG 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 00 CLASSIFICATION:
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SOFTWARE: Patentin
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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N: 536
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ER: 04958.0008-00000
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/O FILING DATE: 06-JUN-1995 CLASSIFICATION: 536

US/08/471,282A

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Best Local Similarity v...
7; Conservative
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APPLICATION NUMBER: US 08/106,944
FILING DATE: 17-AUG-1993
APPLICATION NUMBER: FR 92402326.0
FILING DATE: 21-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 93401310.3
FILING DATE: 11-MAY-1993
ATTORNEY/AGENT INFORMATION:
NAME: POLLET, Jane E.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 202-408-4000
TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO: 80:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
CLASSIFICATION:
PRIOR APPLICATION DATA:
PAPPLICATION NUMBER: US/08/106,944
FILING DATE: 17-AUG-1993
APPLICATION NUMBER: FR 92402326.0
FILING DATE: 21-AUG-1992
                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
ORIGINAL SOURCE:
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LENGTH: 26 amino acids
TYPE: amino acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Casterman, Cecile
APPLICANT: Hamers, Raymond
TITLE OF INVENTION: Immunoglobulins Devoid of Light Chains
NUMBER OF SEQUENCES: 130
                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                   FILING DATE:
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ZIP: 20005-3315
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CITY: Washington
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    Finnegan, Henderson, Farabow, Garrett & Dunner
    1300 I Street, N.W.

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Pred. No. 2
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Search completed: June 13, 2001, 14:27:06 Job time: 627 sec
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US-08-466-710C-80
                                                                                                                                   Query Match
Best Local Similarity
Matches 7; Conserv
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LENGTH: 26 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 93401310.3
FILING DATE: 21-MAY-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 21-MAY-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 049
                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Potter, Jane E.R. REGISTRATION NUMBER: 3:
                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 202-408-4000
TELEFAX: 202-408-4400
                                                                           8 GGGLVQPG 15
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                                                                                                                                                       83.7%;
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Pred. No. 2
                                                                                                                                          Mismatches
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                                                                                                                                          Indels
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Title:
Perfect score:
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Human TNF binding
Heavy chain variab
DP54 VH region. H
Anti-RSV F protein
Anti-HIL12 antibod
Anti-HIL12 antibod
                                                                                              Human adult heart
Human adult heart
Human group III he
Anti-hIL12 antibod
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ALIGNMENTS

21-APR-1999 (first entry)

W94487;

W94487 standard;

peptide;

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THE PROPERTY OF THE PROPERTY O
                                          New purified zonulin - which is capable of reversibly opening mammalian tight junctions, used for enhancing the delivery of agents across intestinal and nasal mucosa and blood brain barrier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zonulin; mammalian tight junction; zonula occludens toxin; ZOT; Vibrio cholerae; vaccine; cholera toxin; polyclonal antibody; intestinal mucosa; nasal mucosa; blood brain barrier.
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Claim 2; Page 45; 64pp; English.

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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CC molecular weight of 47 kD, as determined by EDS-PAGE, which is co-coludens toxin (207) polyclonal antibody and is capable of reversibly co-coludens toxin (207) polyclonal antibody, and is capable of reversibly co-coludens toxin (207) polyclonal antibody, and is capable of reversibly co-coloring mammalian tight junctions. Zonulin proteins function as co-coloring mammalian tight junctions. They can be used for enhancing the absorption of therapeutic agents across tight co-coloring intestinal and nasal mucosa and across tight junctions of intestinal and nasal mucosa and across tight junctions of co-coloring intestinal and nasal mucosa and across tight junctions of co-coloring intestinal and nasal mucosa and across tight junctions of co-coloring intestinal and property coloring intestinal inte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                         New peptide antagonist of zonulin useful as antiinflammatory agent treating cerebral ischemia, stroke, cerebral edema, gastritis, shigellosis, viral gastroenteritis, meningitis, encephalomyelitis
                 Example
                                                                                                                                      WPI; 2000-205565/18
                                                                                                                                                                                                                                                                  03-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zonulin; antagonist; zonula occludens toxin receptor; human; blood-brain barrier; antiinflammatory; gastrointestinal inflammation; therapy.
                                                                                                                                                                                                                      (UYMA-) UNIV MARYLAND BALTIMORE
                                                                                                                                                                                                                                                                                                          28-ЛИГ-1999;
                                                                                                                                                                                                                                                                                                                                                                                         WO200007609-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human adult heart zonulin N-terminal sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Y79130 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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                 ω
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20; Conserv
      Fig 6; 69pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                             98US-0127815
                                                                                                                                                                                                                                                                                                   99WO-US16683.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    describes pure zonulin which has an 1 kD, as determined by SDS-PAGE, which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 98;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                       meningitis, encephalomyelitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.5e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
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RESULT
R87049
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99999999888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                        Framework regions (R87049-52) of human group III (gp3) germ line antibody heavy chain showed homology to corresponding regions (R87053-56, respectively) of the rat anti-human interleukin-5 monoclonal antibody 39D10 heavy chain (see R87039). This homology was utilised in the prodn. of a humanised 39D10 VH (R87058) in which rat 39D10 VH complementarity determining regions were grafted
Sequence
                                                                                                                           Example 3; Fig 4; 69pp; English.
                                                                                                                                                             Anti-human IL-5 recombinant antibody - useful for preventing or reducing eosinophilia and for treating certain allergic diseases
                                                                                                                                                                                                                                       Athwal DS,
                                                                                                                                                                                                                                                            (CLLT ) CELLTECH THERAPEUTICS LTD
                                                                                                                                                                                                                                                                                          17-JUN-1994;
                                                                                                                                                                                                                                                                                                                   16-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                               Humanised antibody; interleukin-5; IL-5; recombinant antibody; antibody engineering; monoclonal antibody; MAb; 39D10; CDR; complementarity determining region; heavy chain; framework;
                                                                                                                                                                                                                                                                                                                                               28-DEC-1995
                                                                                                                                                                                                                                                                                                                                                                        W09535375-A1
                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                            eosinophilia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human group III heavy chain framework 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is that of the N-terminal region of adult human heart zonulin. The N-terminal sequences of human adult and foetal zonulins (see Y9130-36) were compared with Vibrio cholerae zonula occludens toxin (ZOT) to identify a common motif thought to be involved in receptor binding. Peptide antagonists (see Y79105-29) based on this motif are useful as antiinflammatory agents for treatment of gastrointestinal inflammation, and for treatment of conditions associated with breakdown of the blood-brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R87049 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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                      human gp3
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30
                                                                                                                                                                                                                                    Bodmer MW,
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AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                        94GB-0012230.
                                                                                                                                                                                                                                                                                                                  95WO-GB01411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide;
                      framework.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30
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Pred. No. 2.5e-08;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
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Query Match
Best Local Similarity
"hes 20; Conserv

100.0%; Score 98; ilarity 100.0%; Pred. No. Conservative 0; Mismatc)

Mismatches

. 3.9e-08; ches 0; DB 17;

0

Gaps

0

Length 30; Indels

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20 20

B4011

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B40112 standard;

Protein;

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Anti-hIL12

antibody H chain V region amino acid sequence SEQ

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638

05-FEB-2001 B40112

(first entry)

100.0%;

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CC This invention relates to a new human antibody specific for human CC interlewkin-12 (IL-12). The invention also includes antigen binding CC portions that bind to IL-12. Sequences B39485-B39516 represent human CC anti-IL-12 antibody heavy and light chain complementarity determining CC region (CDR) amino acid sequences. Other variable region amino acid sequences are CC given in B39517-B39560 and B40068-B40149. Sequences B39561-B39771 CC represent anti-IL-12 CDR3 related amino acid sequences B39772-B40063 CC represent other CDR sequences. Light chain CDR3 consensus sequences are CC given in B40064-B40067. Primers used in the identification and CC construction of the antibodies of the invention are given in CC C61062-C61071. The antibody of the invention is a neutralising antibody CC and has antirheumatic; antiarthritic; antiasterotic; antiantiantarastic; neuroprotective; antipsoriatic; antiasthmatic; cardiant; antiparastic; antibacterial and immunosuppressive activity. The antibodies or antibacterial and immunosuppressive activity. The antibodies or antiparability and the derivation of the antiparability antisorders associated with detrimental release of human IL-12, especially Crohn's classes, multiple sclerosis and rheumatoid arthritis. They can also be caused in the invention of the antiparastic antiparastic of the property of the constitution of the constituti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antisclerotto; determining region; CDR; antirheumatic; antiarthritic; antiparastto; antibacterial; amunosuppressive; Crohn's disease; multiple sclerosis; rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Salfeld JG, Roguska M,
Kaymakcalan Z, Labkovs
Veldman GM, Venturini
Derbyshire EJ, Carmen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New human antibody specific for human interleukin-12 (IL-12) used to treat disorders characterized by aberrant IL-12 expression e.g. Croh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GEMY )
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      disease and multiple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-1999;
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                                                                   in the manufacture
                                             disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     75; Page 121; 377pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BASF AG.
GENETICS INST INC
  97
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Z, Labkovsky B,
  3
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                                                                      of a
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yy B. Sakorafas P. Friedrich S. My
A. Warne NW. Widom A. Elvin JG, D
S. Smith S. Holtet TL, Du Fou SL;
                                                                   pharmaceutical composition
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Myles
                                                                 can also be
treat human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         e.g. Crohn's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            White M;
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Query Match

100.0%;

Score

98; DΒ 21;

Length

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                            as part of a method of producing chimeric mouse-human antibodies or fragments which have the same binding specificity as a parent Ab but have increased human characteristics, preventing anti-glo
Sequence
                                                          The sequence is that of the heavy chain DP-51 derived from the germline human VH gene DP-51 (from the VH3 family Tomlinson et a 1992) of antibody fragments binding to human TNF. It may be used
                                                                                                                                                                                                                                                                                                                                       01-APR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                              Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human TNF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R34279
                                                                                                                                                                            WPI; 1993-117534/14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      chimeric;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R34279
                  response in humans
                                                                                                   Example; Fig
                                                                                                                                                                                                                     (CAMB-) CAMBRIDGE AN (MEDI-) MEDICAL RES
                                                                                                                                                                                                                                                    24-MAR-1992;
15-MAY-1992;
                                                                                                                                                                                                                                                                                   23-SEP-1991;
25-SEP-1991;
                                                                                                                                                                                                                                                                                                                                                           W09306213-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Monoclonal antibody; anti-globulin response; VL gene;
                                                                                                                         human characteristics
                                                                                                                                    for reducing anti globulin
                                                                                                                                            comprises
                                                                                                                                                                                                                                                                          24-MAR-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ic; mouse-human antibodies; antibody; prevention;
necrosis factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                               CAMBRIDGE ANTIBODY TECHNOLOGY
                                                                                                                                  human antibody polypeptide dimer specific for antigen use of chain shuffling using phage expression, useful ing anti globulin responses in humans for increased
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     binding antibody
                                                                                                                                                                                                 Hoogenboom HRJM,
98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                   6; 109pp; English
AA;
                                                                                                                                                                                                                                                                                   91GB-0020252
91GB-0020377
                                                                                                                                                                                                                                                               92GB-0006318
92GB-0006372
                                                                                                                                                                                                                                                     92WO-GB00883
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67..98
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50..66
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36..49
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31..35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protein;
                                                                                                                                                                                                                      COUNCIL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Framework region FR1"
                                                                                                                                                                                                                                                                                                                                                                             "Framework region
                                                                                                                                                                                                                                                                                                                                                                                                  "Complementarity determining
                                                                                                                                                                                                                                                                                                                                                                                                                      "Framework region FR2"
                                                                                                                                                                                                                                                                                                                                                                                                                                          "Complementarity determining
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                                                                                                                                                                                                 Jespers LSAT,
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mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chain
                                                                                                                                                                                                 Winter
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                                                                                                                                                                                                                                                                                                                                                                                                  region CDR2'
                                                                                                                                                                                                                                                                                                                                                                                                                                          region CDR1"
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                                                                        al
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Query Match Best Local Similarity

100.0%; nilarity 100.0%; Conservative 0

Score 98; Pred. No.

DB 14;

Length 98; Indels

0;

Gaps

0;

Mismatches 0;

Matches

В δÃ

0

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Modification of a rodent antibody (Ab) or fragment by resurfacing in order to produce a humanised rodent Ab can be determined by calculating homology between murine and human Ab antibody surfaces. In order to test were set up: (1) traditional loop graffing; (2) resurfacing approach sequences with most similar chain; and (3) resurfacing approach using human anti-N901 Ab (see R52061). Experiment 3 was carried out using the present with 74 percent homology with anti-N901 Ab (see R52061). Experiment 3 was carried out using the present with 74 percent homology with anti-N901 Ab (see R52067) was preped. by resurfacing. Sequence numbering starts at position 118 in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
         Вb
                                                                                                                          Qy
                                                         Query Match
Best Local S
Matches 20
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R72074
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SQ
                                                                                                                                  I- and H-chain DNA was amplified by PCR from Graves' orbital tissue and clones encoding autoimmune-associated immunoglobulin fragments were obtained. 2/15 clones of H chain (19G1) genes showed homology to the germline gene DP54 (089332), which encodes the protein given in R72074. The DNA (089333) and corresp. amino acid (R72075) sequences of the VH region of a representative clone, OF7H1.19, are provided.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                       Sequence
                                                                                                                                                                                                                                            Disclosure; Page 72; 94pp; English.
                                                                                                                                                                                                                                                               Graves' ophthalmopathy-associated monoclonal antibody by molecular cloning of immunoglobulin genes by PCR \,
                                                                                                                                                                                                                                                                                                                           WPI; 1995-139383/18.
                                                                                                                                                                                                                                                                                                                                                       Mclachlan SM,
                                                                                                                                                                                                                                                                                                                                                                          (NICH-) NICHOLS INST DIAGNOSTICS
                                                                                                                                                                                                                                                                                                                                                                                                        22-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Region
                                                                                                                                                                                                                                                                                                                                                                                                                                  22-SEP-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09508336-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Graves ophthalmopathy associated immunoglobulin protein; orbital antigen; monoclonal antibody; heavy chain; H chavariable region; autoimmunity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Region
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evqlvesggglvqpggslrl 20
                EVQLVESGGGLVQPGGSLRL
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                                                   Similarity 100.
20; Conservative
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                                                                                                                                                                                                                                                                                                                                                    Rapoport B;
                                                                                                                                                                                                                                                                                                                                                                                                     93US-0124469
                                                                                                                                                                                                                                                                                                                                                                                                                              94WO-US10756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA;
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49..67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /label= CDR2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Protein;
                                                                 100.0%;
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100.0%; s
1tive 0;
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                                               Score 98; DB
Pred. No. 1.4
0; Mismatches
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Pred. No. 1.4e-07;
Mismatches 0;
                                                           1.4e-07;
                                                                           DB 16;
                                                                     Length 98;
                                               Indels
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                                           Gaps
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RESULT
R52066

ID R6
AC R5
AC R5
AC R7
AC

EP592106-A1

Region Region Region

/notenote-

"FR 3" "CDR 2" 'note=

"FR 2"

Region

/label= complementarity_determining_region_1
/note= "CDR 1"

/label= framework_region_1 /note= "FR 1" Location/Qualifiers

Кеу Region

Homo sapiens

antibody; humanised; murine; human; heavy chain; light; variable; framework region; complementarity determining region; reshaping; modelling; surface residue; modify.

Heavy chain variable region of human PL0123 antibody.

11-OCT-1996

(first entry)

R52066 standard;

Protein;

98

A

σ

Method of resurfacing of rodent antibodies to produce humanised antibody forms - for producing non-human antibodies with improved therapeutic efficiency by presenting human surface on V-region

WPI; 1994-120230/15.

Pedersen JT,

Rees

AR,

Roguska MA,

Searle SMJ;

(PEDE/) PEDERSEN J T. (IMMU-) IMMUNOGEN INC.

09-SEP-1992; 07-SEP-1993;

92US-0942245 93EP-0307051

Example 1; Fig 4B; 230pp; English.

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RESULT
B40084
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W59614
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                                                                                                                                               SXU
                                                                                                                                                            This is the heavy chain amino acid sequence of germline (GL) pp58 antibody. The invention relates to the construction and use of human MADs specific for the fusion (F) protein of respiratory syncytial virus (RSV) to passively treat, prevent or detect RSV infection. Hul9A, Hul9B, Hul9C and Hul9D MADs are claimed. These are reshaped human antibodies comprising a heavy chain selected from 19A, 19B, 19C or 19D (see W59615-18), which are based on the GL Dp58 sequence, and a light chain selected from 19A, 19B, 19C or 19D (see W59620-21). Such engineered antibodies are neutralising; they inhibit virus growth in viro and in vivo in animal models of RSV infection. Nucleic acids viro and the human MADs, recombianant plasmids (see V41427-33) and host cells (e.g. COS, CHO, myeloma) or are provided.
                                                                                               Query Match
Best Local Similarity
Matches 20; Conserv
B40084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Monoclonal antibody; human; Hu19B; engineered antibody; RSV; respiratory syncytial virus; fusion protein; infection; complementarity determining region; CDR; therapy; diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W59614 standard;
                 B40084 standard; Protein; 98
                                                                                                                                                                                                                                                                                              Disclosure; Fig
                                                                                                                                                                                                                                                                                                               Monoclonal antibodies reactive with Respiratory Syncytial Virus - useful for detection, prevention and treatment of RSV infections
                                                                                                                                                                                                                                                                                                                                                                             (SMIK ) SMITHKLINE BEECHAM CORP
                                                                                                                                                                                                                                                                                                                                                                                                01-NOV-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Region
                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                           WPI; 1998-286600/25
                                                                                                                                                                                                                                                                                                                                                                                                                 23-OCT-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Anti-RSV F protein Hul9 heavy chain GL
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                                                                                                                                                                                                                                                                                                                                                            Dillon
                                                                                                                                               98 AA;
                                                                                               100.0%;
ilarity 100.0%;
Conservative (
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                                                                                                                                                                                                                                                                                              2; 109pp; English.
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50..66
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                                                                                                        Score 98; DB 19;
Pred. No. 1.4e-07;
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B40085
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IJ
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Best Local S
Matches 20
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B40085 standard; Protein; 98

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EVQLVESGGGLVQPGGSLRL

20 0

/ Match 100.0%; Local Similarity 100.0%; nes 20; Conservative 0

Score 98; DB Pred. No. 1.4 D; Mismatches

DB 21; 1.4e-07; 0

Length 98; Indels

0

Gaps

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CC This invention relates to a new human antibody specific for human CC interleukin-12 (IL-12). The invention also includes antigen binding CC portions that bind to IL-12. Sequences B39485-B39516 represent human CC anti-IL-12 antibody heavy and light chain complementarity determining CC amino acid sequences. Other variable region amino acid sequences are CC given in B39517-B39560 and B40068-B40149. Sequences B39561-B39771 CC represent anti-IL-12 CDR3 related amino acid sequences B39772-B40063 CC represent other CDR sequences. Light chain CDR3 consensus sequences are CC given in B40064-B40067. Primers used in the identification and CC construction of the antibodies of the invention are given in CC C61062-C61071. The antibody of the invention is a neutralising antibody CC and has antirheumatic; antiarthritic; antisclerotic; antiparasitic; cantibacterial and immunosuppressive activity. The antibodies or CC antibacterial and immunosuppressive activity. The antibodies or CC antiparation fragments are useful in the treatment of disorders CC associated with detrimental release of human IL-12, especially Crohn's CC disease, multiple sclerosis and rheumatoid arthritis. They can also be CC used in the manufacture of a pharmaceutical composition to treat human CC IL-12 disorders
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New human antibody specific for human interleukin-12 (IL-12) used to treat disorders characterized by aberrant IL-12 expression e.g. Crohn's disease and multiple sclerosis -
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 75; Page 121; 377pp; English.
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Veldman GM, Venturini A,
Derbyshire EJ, Carmen S,
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(GEMY ) GENETICS INST INC
                                                                                  IL-12 disorders.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Roguska M., Paskind M., Banerjee S., Tracey DE., Z., Labkovsky B., Sakorafas P., Friedrich S., Myl Venturini A., Warne NW., Widom A., Elvin JG., Du J., Carmen S., Smith S., Holtet TL., Du Fou SL:
    AA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0126603
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l arthritis.
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cc region (CDR) amino acid sequences, and also includes variable region camino acid sequences. Other variable region amino acid sequences are given in B39517-B39560 and B40068-B40149. Sequences B39561-B39771 CC represent anti-II-12 CDR3 related amino acid sequences, B3972-B40063 CC represent other CDR sequences. Light chain CDR3 consensus sequences are CC given in B40064-B40067. Primers used in the identification and CC construction of the antibodies of the invention are given in CC construction of the antibodies of the invention are given in CC c61062-C61071. The antibody of the invention is a neutralising antibody CC and has antirheumatic; antiarthritic; antiasthmatic; cardiant; antiparasitic; CC entroprotective; antipsoriatic; antiasthmatic; cardiant; antiparasitic; CC antibacterial and immunosuppressive activity. The antibodies or CC antipsoriatic with detrimental release of human II-12, especially Crohn's CC disease, multiple sclerosis and rheumatoid arthritis. They can also be used in the manufacture of a pharmaceutical composition to treat human or II-12 also be a constructed with detrimental composition to treat human in the construction is a construction of a pharmaceutical composition to treat human in the construction is a construction of the construction of a pharmaceutical composition to treat human in the construction is a construction of the construction of a pharmaceutical composition to treat human in the construction is a construction of the co
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 75; Page 121; 377pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Salieru Z, Launce Kaymakcalan Z, Launce GM, Venturini
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     complementarity determining region; CDR; antirheumatic; antiarthritic; antisclerotic; neuroprotective; antipsoriatic; antiasthmatic; cardiant; antiparasitic; antibacterial; immunosuppressive; Crohn's disease; multiple sclerosis; rheumatoid arthritis.
                                                                                                                                                                                                                                                                    IL-12 disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New human antibody specific for human interleukin-12 (IL-12) used to treat disorders characterized by aberrant IL-12 expression e.g. Crohn's disease and multiple sclerosis -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-638250/61.
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GENETICS INST INC.
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                                                                                               Conservative
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Z, Labkovsky B,
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(Y B, Sakorafas P, Friedrich S, Myles
N, Warne NW, Widdom A, Elvin JG, Dunca
S, Smith S, Holtet TL, Du Fou SL;
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                                                                                                              Score 98; DB 21;
Pred. No. 1.4e-07;
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Matches Query Match Best Local

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Conservative

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Mismatches

100.0%;

Score 98; DB 21; Pred. No. 1.4e-07;

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98;

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This invention relates to a new human antibody specific for human control interleukin-12 (IL-12). The invention also includes antigen binding portions that bind to IL-12. Sequences B39485-B39516 represent human can antibody heavy and light chain complementarity determining cantin-IL-12 antibody heavy and light chain complementarity determining cannon acid sequences. Other variable region amino acid sequences are constituted in B39717-B3950 and B40068-B40149. Sequences B39517-B3950 and B40068-B40149. Sequences B39512-B39717-B40063 crepresent anti-IL-12 CDR3 related amino acid sequences B39572-B40063 crepresent other CDR sequences. Light chain CDR3 consensus sequences are construction of the antibodies of the invention are given in B40064-B40067. Primers used in the identification and construction of the antibody of the invention is a neutralising antibody cand has antirheumatic; antiarthritic; antiscierotic; antiinflammatory; candians antipacasitic; antiarthritic; antiscierotic; antiinflammatory; cantibacterial and immunosuppressive activity. The antibodies or constructorial and immunosuppressive activity. The antibodies or cantibacterial and immunosuppressive activity. Especially Crohn's cascaisted with detrimental release of human IL-12, especially Crohn's cused in the manufacture of a pharmaceutical composition to treat human custorials.
  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 75; Page 121; 377pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New human antibody specific for human interleukin-12 (IL-12) used treat disorders characterized by aberrant IL-12 expression e.g. Cr disease and multiple sclerosis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kaymakcalan Z, Labkovsky B,
Veldman GM, Venturini A, W
Derbyshire EJ, Carmen S, S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; neutralising antibody; interleukin-12; IL-12; antiinflammatory; complementarity determining region; CDR; antirheumatic; antiarthritic; antisclerotic; neuroprotective; antipsoriatic; antiasthmatic; cardiant; antiparasitic; antibacterial; immunosuppressive; Crohn's disease; multiple sclerosis; rheumatoid arthritis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Salfeld JG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; neutralising antibody;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B40086 standard;
                                      disorders.
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GENETICS INST INC
  86
  AA;
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B, Sakorafas P. Friedrich S. Myles
Warne NW, Widom A, Elvin JG, Dunce
Smith S. Holtet TL, Du Fou SL;
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rhoumatic: antiarthritic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Myles A;
Duncan
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B40087
                                                                                                                                                                           CC This invention relates to a new human antibody specific for human CC interleukin-12 (IL-12). The invention also includes antigen binding CC portions that bind to IL-12. Sequences B39485-B39516 represent human CC anti-IL-12 antibody heavy and light chain complementarity determining CC region (CDR) amino acid sequences, and also includes variable region CC amino acid sequences. Other variable region amino acid sequences are CC given in B39517-B39500 and B40068-B40149. Sequences B39512-B39771 CC represent anti-IL-12 CDR3 related amino acid sequences B39772-B40063 CC represent other CDR sequences. Light chain CDR3 consensus sequences are CC given in B40064-B40067. Primers used in the identification and CC construction of the antibodies of the invention are given in CC C61062-C61071. The antibody of the invention is a neutralising antibody CC and has antirheumatic; antiarthritic; antisclerotic; antiparasitic; CC antibacterial and immunosuppressive activity. The antibodies or CC antigen-binding fragments are useful in the treatment of disorders CC antigen-binding fragments are useful in the treatment of disorders CC disease, multiple sclerosis and rheumatoid arthritis. They can also be CC used in the manufacture of a pharmaceutical composition to treat human CC II.-12 disorders
                                                  Query Match
Best Local S
Matches 20
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                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 75; Page 121; 377pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         disease and multiple sclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-638250/61.
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Derbyshire EJ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antisclerotic; neuroprotective; antipsoriatic; antiasthmatic; car
antiparasitic; antibacterial; immunosuppressive; Crohn's disease;
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                                                                                                                                                                     IL-12 disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            treat disorders characterized
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(GEMY ) GENETICS INST INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   multiple sclerosis; rheumatoid arthritis.
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EVQLVESGGGLVQPGGSLRL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               neutralising antibody; interleukin-12;
                                                    Similarity
20; Conser
                                                                                                                                      98
                                                  100.0%;
llarity 100.0%;
Conservative (
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Ky B. Sakorafas P. Friedrich S. Myles A;

A. Warne NW, Widdom A. Elvin JG, Duncan AR;

S. Smith S. Holtet TL, Du Fou SL;
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                                                  Score 98; DB 21;
Pred. No. 1.4e-07;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aberrant IL-12 expression e.g. Crohn's
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IL-12;
                                                                                  Length 98;
                                                    Indels
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ic; antiarthritic;
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B40094
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CC This invention relates to a new human antibody specific for human control interleukin-12 (IL-12). The invention also includes antigen binding comportions that bind to IL-12. Sequences B39485-B39516 represent human compositions that bind to IL-12. Sequences B39485-B39516 represent human composition (CDR) amino acid sequences, and also includes variable region composition acid sequences. Other variable region amino acid sequences are composition and sequences. Other variable region amino acid sequences are composition in B39517-B39560 and B40088-B40149. Sequences B39517-B39719 cc represent anti-IL-12 CDR3 related amino acid sequences, B39772-B40063 crepresent other CDR sequences. Light chain CDR3 consensus sequences are composition of the antibodies of the invention are given in B40064-B40067. Primers used in the identification and construction of the antibodies of the invention are given in CC C61062-C61071. The antibody of the invention is a neutralising antibody can has antirheumatic; antiarthritic; antisclerotic; antiparasitic; cantibacterial and immunosuppressive activity. The antibodies or constitute of intervention are given in continuous constated with detrimental release of human IL-12, especially Crohn's disease, multiple sclerosis and rheumatoid arthritis. They can also be cused in the manufacture of a pharmaceutical composition to treat human cr. IL-12, discreters
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disease and
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Veldman GM, \
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antisclerotic; neuroprotective; antipsoriatic; antiasthmatic;
antiparasitic; antibacterial; immunosuppressive; Crohn's dise
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New human antibody specific for human interleukin-12 (IL-12) used to treat disorders characterized by aberrant IL-12 expression e.g. Crohn's
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complementarity determining region; CDR; antirheumatic; antiarthritic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; neutralising antibody; interleukin-12; IL-12; antiinflammatory;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BASF AG.
GENETICS INST INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           multiple sclerosis
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Venturini A, Wa
J, Carmen S, Sm
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yy B, Sakorafas P, Friedrich S, My'
N, Warne NM, Widom A, Elvin JG, Du
S, Smith S, Holtet TL, Du Fou SL;
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Duncan AR;
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Query Match Best Local Similarity

100.0%; Score 98; DB 21; 100.0%; Pred. No. 1.4e-07;

Length 98; Indels

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Gaps

0

Sequence

98

Matches

Conservative

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Mismatches

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EVQLVESGGGLVQPGGSLRL evqlvesggglvqpggslrl 20

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B40095

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cardiant;

B40095 standard; Protein; 98

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EVQLVESGGGLVQPGGSLRL

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Matches

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Conservative

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This invention relates to a new human antibody specific for human continuous that bind to II-12. Sequences B39485-B39516 represent human continuous that bind to II-12. Sequences B39485-B39516 represent human continuous that bind to II-12. Sequences B39485-B39516 represent human continuous that bind to II-12. Sequences B39485-B39516 represent human continuous variable region continuous variable region continuous variable region amino acid sequences are given in B39517-B39560 and B40068-B40149. Sequences B39561-B39771 continuous variable region amino acid sequences are represent anti-II-12 CDR3 related amino acid sequences, B39772-B40063 continuous variable region and continuous variables of the invention are given in continuous variables of the invention is a neutralising antibody continuous variables of antibacterial and immunosuppressive activity. The antibodies of the associated with detrimental release of human II-12, especially Crohn's continuous variable region in the treatment of disorders associated with detrimental release of human II-12, especially Crohn's continuous variables and rheumantoid arthritis. They can also be read in the mannifacture of a charmacontical composition to treat human incomplements are useful in the treatment of treat human incomplements and rheumantoid arthritis. They can also be region to the mannifacture of a charmacontical composition to treat human incomplements are useful composition to treat human incomplements and rheumantoid arthritis.
    Query Match
Best Local Similarity
                                                                                             Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 75; Page 121; 377pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New human antibody specific for human interleukin-12 (IL-12) used to treat disorders characterized by aberrant IL-12 expression e.g. Crohn's
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Derbyshire EJ,
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                                                                                                                                                         in the manufacture of a pharmaceutical
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GENETICS INST INC
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Venturini A, W
J, Carmen S, S
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  100.0%;
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y B, Sakorafas P, Friedrich S, Myles A;
, Warne NW, Widom A, Elvin JG, Duncan;
, Smith S, Holtet TL, Du Fou SL;
  Score 98;
Pred. No.
DB 21;
1.4e-07;
                                                                                                                                                           composition
                     98
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Duncan AR;

White M;

Length

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RESULT
B40096
                                                                                                                                     interleukin-12 (IL-12). The invention also includes antigen binding portions that bind to IL-12. Sequences B39485-B39516 represent human anti-IL-12 antibody heavy and light chain complementarity determining region (CDR) amino acid sequences, and also includes variable region amino acid sequences. Other variable region amino acid sequences are given in B39517-B39560 and B40068-B40149. Sequences B39561-B39771 represent anti-IL-12 CDR3 related amino acid sequences, B39772-B40063 represent other CDR sequences. Light chain CDR3 consensus sequences are given in B40064-B40067. Primers used in the identification and construction of the antibodies of the invention are given in C61062-C61071. The antibodies of the invention are given in construction of the antibody of the invention are given in construction antiportatic; antiarthritic; antisclerotic; antiinflammatory; neuroprotective; antiposcriatic; antiasthmatic; cardiant; antiparasitic; antiparasitic;
                                             antibacterial and immunosuppressive activity. The antibodies or antigen-binding fragments are useful in the treatment of disorders associated with detrimental release of human IL-12, especially Crohn's disease, multiple sclerosis and rheumatoid arthritis. They can also be used in the manufacture of a pharmaceutical composition to treat human
                                                                                                                                                                                                                                                                                                                                                                              This invention interleukin-12
                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 75; Page 121; 377pp; English.
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Veldman GM, Venturini A,
Derbyshire EJ, Carmen S,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disease and multiple sclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New human antibody specific for human interleukin-12 (IL-12) used to treat disorders characterized by aberrant IL-12 expression e.g. Crohn's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-638250/61.
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Labkovsky B, Sakorafas P, Friedrich S, Myles
nturini A, Warne NW, Widom A, Elvin JG, Dunca
Carmen S, Smith S, Holtet TL, Du Fou SL;
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